

# DETERMINANTS OF STUDENT ACHIEVEMENT

*A COMPARATIVE STUDY OF THE CASE  
OF A MISSION, PUBLIC AND PRIVATE  
SCHOOL IN CAMEROON*

BOTE ROSE NTONDUMU



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Author: Bote Rose Ntondumu

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## **DEDICATION**

This work is dedicated to my Father who is many standard deviations above the mean.

## **ABSTRACT**

Studies of student achievement have been done in many parts of the world with different focal points. This study was carried out in the Anglophone region of Cameroon, specifically in Buea. It was done in three schools from the three main providers (mission, public and private). The class choice was the first class of the high school section which is not only the first class after the public exam but also has students from different schools. The resulting sample is a mixture of students not only from the three chosen schools but also from other schools who moved to take the high school studies in these chosen schools. This study focused on the student specific characteristics, home background and school resources. Questionnaire was the main form of data collection and correlation and regression analysis was used to establish relationships to achievement. The study found that all three groups of factors are important in student's achievement as is the case in most regions of the world where similar studies have been carried out. This study concluded that student's specific characteristics in terms of their efforts and motivation was most influential in their performance. Their home backgrounds especially their home assets as well as school resource like the library was instrumental in their performance. This study also highlighted differences in the three main types of schools. The mission and public schools had for most aspects unique differential patterns while the private school had a mixture of the other two schools with some aspects leaning towards the mission school and others towards the public school.

## TABLE OF CONTENT

Acknowledgement.....	v
Dedication.....	vi
Abstract.....	vii
Table of content.....	viii
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.0 Chapter introduction.....	1
1.1 Rational for study.....	1
1.2 Education background in Cameroon.....	2
1.3 Problem statement.....	3
1.4 Research objectives.....	4
1.5 Research questions.....	4
1.6 Limitation of study .....	4
1.7 Organization of study.....	5
<b>2 THEORETICAL FRAMEWORK AND PREVIOUS RESEARCH.....</b>	<b>6</b>
2.0 Chapter Introduction.....	6
2.1 Achievement concept and breakdown of factors.....	6
2.1.1 School resources .....	7
2.1.2 Family background .....	8
2.1.3 Student specific characteristics .....	9
2.1.4 School external perspective .....	10
2. 2 Previous research.....	11
<b>3 METHODOLOGY AND STUDY AREA .....</b>	<b>15</b>
3.0 Chapter introduction.....	15
3.1 Study site and school choices .....	15
3.1.1 Government Bilingual Grammar School (BGS) Molyko .....	16
3.1.2 Baptist High School (BHS) Great Soppo Buea.....	17
3.1.3 Summerset Bilingual Collage (SUBICOL) Molyko.....	17
3.2 Methodology.....	18
3.2.1 Data collection Method.....	18



3.2.2 Questionnaire.....	19
3.2.3 Sampling.....	19
3.2.4 Questionnaire composition.....	19
3.2.5 Variables of interest and method of analysis.....	22
3.2.6 Validity and reliability of data and instrument.....	24
3.2.7 Ethical concerns.....	24
<b>4 PRESENTATION OF DATA AND STATISTICS.....</b>	<b>25</b>
4.0 Chapter introduction.....	25
4.1 Descriptive statistics.....	25
4.1.0 Background information.....	25
4.1.1 Student specific characteristics.....	28
4.1.2 Home background.....	42
4.1.3 School resources.....	50
4.1.4 Choice of school.....	53
4.2 Inferential statistics .....	55
4.2.0 OLS analysis for the entire sample .....	55
4.2.1 OLS analysis for the public school.....	57
4.2.2 OLS analysis for the mission school.....	58
4.2.3 OLS analysis for the private school.....	59
<b>5 DISCUSSION OF RESULTS.....</b>	<b>60</b>
5.0 Chapter introduction.....	60
5.1 Comparing the schools.....	60
5.2 Determinants of student achievement in entire sample.....	67
5.3 Determinants of student achievement in the public school.....	72
5.4 Determinants of student achievement in the mission school.....	74
5.5 Determinants of student achievement in the private school.....	75
<b>6 CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>76</b>
6.0 Chapter introduction.....	76
6.1 Conclusions.....	76
6.2 Recommendations for performance.....	78
6.3 Recommendations for further research.....	79
References.....	80
Appendix: Questionnaire.....	83



# **CHAPTER ONE: INTRODUCTION**

## **1.0 Chapter Introduction**

This chapter covers the rationale for the study and background of the educational system in Cameroon in the first part. The chapter continues with the statement of problem followed by the research objectives which maps out the research questions. This chapter gives the perceived boundaries or limitations within which the study will be focused. Finally the content and organization of the proceeding chapters is presented to give an overview of the entire thesis.

## **1.1 Rationale for Study**

The study of what influences student's achievement in a particular subject or overall school performance has been used as a tool for school improvement in many countries. These studies concentrate on the various factors that play on the end results from the schooling process. Improving the efficiency of the outcome of schools is essential for most governments as a foundation for a well trained and equipped manpower. These studies also have a cost reduction effect.

The cost reducing effect associated with studies of student achievement is captured by the reduction in repetition rates within the schools. This effect is beneficial to the individual families. Studies of achievement as already mentioned above increases success rate which directly implies a reduction in the repetition rate within the schools. Repeating a class entails a cost in paying the tuition fees and other school related cost. The effect of this extra cost is greatly felt in countries where poverty is prevalent and limited resources has to be spread over competing vital needs as well as many children. Repetition comes with an indirect effect associated with psychological stress impacted on the child as a result of being separated from his/her friends and mates.

Provision of education has been decentralized unlike in the past when it was solely the responsibility of the government. In many countries, the private as well as religious groups have created schools. Despite the fact that these schools typically follow the state established curriculum, their teaching approach and other factors may not follow the conventional approaches in the public schools. Finding these common grounds as well as deviations will be interesting.

The above reasons justify the need for a study of what factors are more influential in ensuring success and within the different schools.

## 1.2 Educational Background in Cameroon

Cameroon was colonized by the British and the French and after independence the two main cultures were adopted. These distinct cultures extended to the educational systems adopted within the country. For several years, attempts were made to unify the systems so as to have one educational system with language of instruction being English and French for the English and French speaking parts respectively. By 1998 all attempts had failed and the systems were officially declared independent and were called the Anglophone and francophone systems with separate curriculum, teaching and evaluation methods. This thesis will focus on the Anglophone system of education. The language of instruction at all levels in this system is English. Education is provided by the government, religious institutions and the private sector under the supervision of the various education ministries.

The Anglophone system begins with a nursery school<sup>1</sup> for children between the ages of 2 and 5 years. According to UNESCO figures, the gross enrollment ratio (GER) at this level in 2006 was 19%.

The next level is the primary level which was declared free and compulsory by the president in 2000 though with no enforcing law or mechanism to ensure the compulsory aspect of the decree. Primary education is free only for the public schools as private and mission schools still charge fees. This level begins typically at 6 years of age and runs for 6 years. The GER was 95% in 2007 with a net enrollment ratio of 70%. This school level has a repetition rate of 40% (Fonkeng, 2006) and a survival rate to grade five of 85%, (UNESCO, 2006). This level though compulsory has not been able to meet the 100% attendance because of out of pocket cost to parents (PTA, school books, uniforms), irrelevance of the curriculum to the surrounding community and language of instruction different from the local languages (Fonkeng, 2006).

After the primary level, the children have the options of doing a particular trade (if they cannot afford more education), or get into a grammar or vocational/technical secondary school. Only 36% of those who complete the primary continue on to the secondary school. The secondary school last for four years in the vocational and five

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<sup>1</sup> Pre school according to international classification

years in the grammar section, after which there is a public exit exam into the high school level<sup>2</sup>.

The high school level is two and three years for the grammar and vocational schools respectively. After this level there is the final exit exam that grants entrance into universities. The university system is characterized by a three year bachelor degree system, two years masters' degree system. There are possibilities though very limited of post graduate studies in English. The GER at the tertiary level is 7% with 8% boys and 6% girls attendance rate (UNESCO, 2006).

The study of student's achievement is very crucial for a country like Cameroon which is a heavily indebted poor country with many families still living below the poverty line. The results from the study will hopefully be transformed into meaningful policies which will be implemented to reduce the rate of class repetition. Given that education is provided by three distinct providers, a study of this nature is essential in bringing out the factors of influence in the various schools as well as weaknesses so as to improve on schools performances.

### **1.3 Problem Statement**

Cameroon has a total population of over 17 million of which over 60% are within the economically viable age. Improving the performance of the economically viable population will be very beneficial to the growth of the country. However, high repetition rates and low quality performance is predominant in most schools. How then can school performance be improved and the repetition rate reduced to improve performance of the available and future work force? There is thus a need to determine what factors are necessary to improve performance in schools as well as reduce or eliminate repetition in schools.

Furthermore, provision by three mutually exclusive providers leaves much to be learned in terms of the strengths and weaknesses. There is bound to be a common ground on which these schools can learn from each other and make improvements on the education provided.

This study will find out the factors essential towards students performance as well as identify the main characteristics of the three different types of schools in line with their student's achievement.

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<sup>2</sup> Upper secondary school according to international classification

## **1.4 Research Objectives**

This study will have as main objectives:

- To find out the main determinants of student achievements within the Anglophone educational system in Cameroon.
- To compare the determinants within the three main educational providers; public, mission and private.

The specific objective will be:

- To find out elemental and student perceptive differences between the mission, public and private schools within the Anglo Saxon educational system in Cameroon.

## **1.5 Research Questions**

The above objectives transform into the following research questions:

- What are the main determinants of student achievement in the English system of education in Cameroon?
- Are there any fundamental as well as specific differences between the public, mission and private schools in English Cameroon with respect to achievement?
- What group of determinants (home, school, wide environment or student characteristics) is most influential to student's achievement within the English educational system in Cameroon?

## **1.6 Limitation of study**

- The study of student achievement is a very large study comprising of many factors under the canopies of home background and resources, student specific characteristics, school resources, wider environment, teachers qualification and performance. Given the limited time and space, I will concentrate on the student's specific characteristics, home background and school resources. Within these areas of concentration, I will attempt to touch on all vital factors but with focus on the student's perspectives.
- The education system provided by the three main providers run from primary right up to university level. The study of achievement is possible at all levels but this study will focus at the secondary school level because it is

at this level that the first major decisive public national exam is taken. Also at this level, the students are better placed to express their perceptions on the various determining factors.

- Within the Anglophone system, there are over 300 schools providing secondary education under the three main providers. This study for convenience will be limited to one school per provider so as to ensure efficient use of limited time required to complete the study.

## **1.7 Organization of study**

Chapter two of this study will cover the relevant theories as well as previous research on student achievement. This chapter will introduce the various theoretical concepts that will be included in the empirical investigation of the study.

Chapter three will introduce the methodological approaches applied in the study beginning with an overview of the study area and explain the choice of schools and respondents of the study. This chapter will also cover the data collection instrument, variables of interest and their measures. Issues on validity and reliability will be discussed as well as the necessary ethical concerns.

Chapter four will present the data using descriptive statistics and also the necessary correlations will be established among variables. The second part will present the results of the inferential statistics.

Chapter five will be for the discussion of results.

Inline with the findings, chapter six will cover the conclusions of the study, recommendations and suggestions for further research will be made.

## **CHAPTER TWO: THEORETICAL FRAMEWORK AND PREVIOUS RESEARCH**

### **2.0 Chapter Introduction**

In this chapter, the factors determining school achievement is broken down into four main categories: Student specific characteristics, school specific characteristics, home background and the external environment. Some relevant theories and developed concepts on each category is discussed in this chapter, the last part of the chapter covers literature on the factors which shows what has been done within the same field in different areas of the world as well as the nature and direction of established relationships.

### **2.1 Achievement concept and the break down of factors**

Achievement is a broad concept that incorporates many factors. Achievement in education typically entails a positive outcome from the educational endeavor; this could be a job, move to a higher level of education or even a pass in an in class test or quiz. These goals can be classified under the long and short term goals. The long term goals include getting a job and getting a better life from the fruits of the educational endeavor (human capital theory). The short term goal on the other hand concentrates on the immediate results from the educational endeavor. Midgley et al (1998) identified three main components of the short term achievement theory: goal to develop ability or task goal orientation, goal to demonstrate ability or ability approach goal orientation and the goal to avoid the demonstration of the lack of ability or the ability avoid goal orientation. The task goal orientation has been found to have the most outcomes in achievement as it orients students to focus on the learning of the task at hand. The task at hand in most schools is usually guided by the given curriculum or syllabus in place. The students are tested on how well they have mastered the contents and or task set within the limits of the syllabus. Task goal orientation has also been found to be associated to a number of positive outcomes like high level efficiency, use of more cognitive strategies, persistence, (Pintrich, 2000).

Determinants of student achievement can also be classified under four main groups: School resources, family or home background, student specific characteristics and the



school external factors. These distinctions are not clear cut but are prone to some overlapping.

### **2.1.1 School Resources**

What the school owns or does not own has a vital role to play in the outcome from the schools. In most countries, funding to schools is usually per student, but this does not generally give an insight on how the school revenue is allocated towards the different competing needs. According to Betts et al (2000), school resources for Californian schools mainly comprises of class size, curriculum and teachers credentials and the allocation of funds among these resources is the call of the individual schools. Due to limited funds, there is always a trade off among the resources. The most common trade off is between class size and teacher's credentials. They also pointed out that schools that cater for the disadvantaged or the minority groups of the society are always plagued with less funding and subsequently less resources.

School resources and its role on achievement has been very controversial as writers like Hanushek (1986, 1997) repeatedly concluded no or relatively small influence of school resources on student's achievement. On the other hand writers like Hedgers and Greenwald (1996), Krueger (1999), Krueger and card (1996) and Eide (1998) have all persistently concluded on a positive relationship. Eide notes that researchers that conclude on little or no relationship between the variables used ordinary least square (OLS) or instrumental variables (IV) to compute the mean effects. This sort of analysis will most certainly give compacted results and thus little variations in the key variables. He uses a quantile regression approach which breaks down the mean effects into a conditional distribution. The effects are then evaluated per distribution and the results show an overall increase effects with a clear indication of which distributions show maximum response. In the OLS and IV methods, the responsive units are drowned by the unresponsive units does giving a final result of non responsiveness.

School library is a very vital resource to any school. Many studies have shown a positive relationship between libraries and student achievement in a school. A major research was carried out for the Australian school library association by Lonsdale Michele (2003). Her research showed some key points on the relationship between libraries and student achievement. These include among others:

- A well staffed, resourced and funded library program will increase student's achievement irrespective of the educational level of adults in the community.
- A strong computer connection between the library and the class room will improve student achievement.
- A large library collection backed by a high usage will improve student's achievement.
- Strong collaboration between the class room teacher and the librarian will lead to improve student achievement.
- Vocabulary growth, greater comprehension, spelling, writing style and grammatical ability are all greatly enhanced by a print rich environment.
- Libraries can increase student's self esteem, independence and sense of responsibility towards their learning activities.

She also notes that despite this rosy picture of the role of the library, decision makers are very reluctant to acknowledge the role of libraries and so policies and funds towards this school resource is always limited.

### **2.1.2 Family Background**

The main focus here has been on the parent's social and economic status (SES) which is assumed to relate onto the level of involvement of the parent in the student school life. This relationship is known to be positive and thus parents of higher SES are more involved in their children's school life which leads to more positive attitude towards school, improve homework habits, low levels of absenteeism and dropping out (Stevenson & Baker, 1987). On the other hand, Ho Sui-Chu and Douglas (1996) did a study with a breakdown of parents involvement. They distinguished involvement in on campus activities like PTA meetings and volunteering from school related discussions at home, home discipline and help with homework. In this new light, SES was not related to parent's involvement especially with activities at home but school related discussions had the highest impact on achievement. Parents involvement on campus showed a positive influence on reading skills but relatively low on mathematic skills.

Variations in the effect of family background on student achievement are significantly smaller in developed countries compared to developing countries. A

study comparing family background and achievement between Europe and the United State of America using the TIMMS test by Ludger (2004), shows a positive relationship between the two variables but with almost an identical pattern between the two continents. This is largely explained by the equal educational opportunities found within these regions. In developing countries, where educational opportunities are not inclusive to the entire population, the role of family background plays a very big role in student achievement within a country and also across countries. In most developing countries, the background influences the type of school one can attend, (Jimenez et al, 1991).

### **2.1.3 Student specific characteristics**

These involve student's attitudes towards learning, their goals both short term and long term goals, motivation and in a broad sense the peer factor.

A study by Schraw et al (1995), distinguished two main student orientations. They identified the learning and the performance orientations. The learning orientation is when the student is concerned about improving their competence while the performance orientation is when the student is concerned about proving their competence. Students who have a higher learning orientation use more strategies to enhance understanding and thus achievement than the students with a high performance orientation.

Students short term goals as studied by Ames & Archer (1988) can be divided into mastery and performance goals within the classroom settings. Students with a mastery goal showed a high preference for challenging tasks, positive attitude towards the class, used more effective strategies, and most importantly they believed that success is a result of personal efforts. On the other hand, students with performance goal as top priority focused more on their ability. Most often they rate their ability negatively and tend to attribute low achievement to lack of ability. Long term goals entail future career and this reflects on the student's achievement. The long term goals maps onto the student's motivation.

Student's motivation obviously has a positive role to play in their achievement as the more motivated a student is, the more strategies they will imply to better comprehension and achievement. Motivation is not readily depicted thus proxies have to be used as an indicative factor of this variable. Colin Rogers (1997) identified

measures for attributes for success and failure, goal orientation and self esteemed as measures of motivation among British and Chinese students.

The role of peers in student achievement can be seen in relation to his classmates as well as with friends not necessarily within the same class. Henderson et al (1978) studied peer effects within a class room setting. They concluded that a positive non linear relationship exist between a student's average IQ with the mean IQ of the class. A student with a high IQ responds positively to being put in a class with a high average IQ and the opposite holds when the student is put in a class with a low average IQ.

Peer relationship is the most influential form of social capital to most students. The social relationship among peers influences the social relationship the student has with the teachers and the parents, aspirations and goals in life, attitudes towards school and life as a whole, (David, 1981). Peer effect is gender and age sensitive, this was concluded in the case of the Norwegian secondary school setting by Huang (2009). She found peer social effects to have a weak positive relationship with student achievement and a corresponding gender bias towards females. She also found a high tendency of higher peer social capital with increase age implying with increase age of teenagers, the more they are likely to be influenced by their peers.

#### **2.1.4 School external perspective**

This covers the public's perception of the school. Different schools within a country are characterized differently; it may be based on the financial cost or competitive entrance. These characteristics decide on the type of students that will be found in a particular school. If the differential factor is academics, the distribution will be one in which there are over achieving schools and underachieving schools. In the case where the distinction is financial or economic background, the distribution will be in terms of the rich and middle class students concentrated in particular schools while the poor and the less financially privileged will be in other schools. The rich schools will most certainly be well equipped and more resourceful thus greater achievements than the poor schools. Glewwe & Hanan (1994) studied the case of Ghana where higher ability students are selected into better schools and low ability students into other schools. This existing status quo has resulted in perpetual low achieving from the low ability schools with late enrollment and early drop outs a persistent feature of these schools.

This differentiation is hard to change as it has been enhanced by external perception of the schools. The underachieving schools as well as the poor schools are common knowledge within the society. Policies towards a change in these schools are usually not very successful because of the existing bad image of the schools. The failure of vocational education in most developing countries in achieving the desired developmental effects is partially as a result of negative perception of these schools by the communities. These schools are perceived to be for the underachievers from primary school and also for the poor who need to learn a trade rather than grammar education, (Foster, 1966).

## **2.2 Previous Research**

A move towards achieving the EFA goals in most countries has been matched by a corresponding increase in class size. This increase has led to a very high teacher to students' ratio in many countries. Michaelowa (2001), studied 37 hypothesized variables affecting basic learning competencies in Cameroon, Cote d'Ivoire, Burkina Faso, Madagascar and Senegal. She concluded that there is a negative relationship between class size and student's performance. She also concluded that a class size of 62 is the optimum and above this number, learning becomes problematic and less efficient. The problem with large class sizes is captured by the teacher's ability to manage the classroom and the instructional time. On the part of the students, engagement and attention in the class are the two aspects most affected by class size, (Benbow et al 2007). This variable has also been evaluated by the Harvard economist Hoxby (2000) on 649 elementary schools in the US. She used variation in class size inline with the population changes to evaluate the effects on student's achievement. She concluded that there was no statistically significant effect on student achievement with changes in class size. Not even a 10% reduction in class size will lead to a statistically significant change in the student's achievement.

Greenwald et al (1996) carried out a meta analysis based on data from 60 surveys in the US to establish the relationship between school resources and achievement. They concentrated on school inputs (quantity and quality of teachers, class size) as the school resources. They concluded that school resources have a positive impact on student's achievement and that increasing the amount allocated to schools to acquire

the adequate resources should be a focus point for policy makers. Thus increasing schools capital should pay off as an improvement in student performance.

Hanushek (1997) argues that the positive relationship between school resources and achievement established by many studies is not strong or consistent. Most conclusions are sensitive to inclusion and variations in family inputs thus making them inconsistent. He concluded that basic policies of resource availability will not adequately resolve the problem of underachievement within schools.

School resources was found particularly important in student achievement in South Africa by Case & Deaton (1999). They studied the situation just before and after apartheid and one major conclusion was the important role of school inputs in achievement levels especially for black dominated schools. These schools before the apartheid were characterized by excess students backed by a relatively less amount of resources. This situation was due to racial bias in the white controlled institutions that were in charge of school funding. After apartheid, the situations changed and these schools with increase in resources had a remarkable increase in performance.

The role of the teachers in student achievement cannot be downplayed as they influence both present and future achievements. Sanders and Rivers (1996) wrote a progress report to the Tennessee Value Added Research and Assessment center with the finding that more than 50% of differences in students achievement was as a results of teacher's effectiveness. The teacher's effects are both additive and cumulative with small compensatory evidence. Increase teacher's effectiveness first benefits the lower achievers and different ethnic groups respond equivalently to teacher's effectiveness.

Parcel & Dufur (2001) compared the role of school capital and family capital on student's achievement. They used data from the national longitudinal survey of youths and merged with child mother data and came up with a sample size of 20344 for math and 2203 for reading. They came to the finding that family capital effects are stronger than school capital effects but both effects are additive, thus a combination of both effects will boost student achievement.

School resources also play a role on the extent of the parent's involvement. Houtenville & Smith (2008) estimated the value added educational function with parents effort as an input variable using data from the national educational longitudinal study. They found out that parents effort have a larger positive relationship with student's achievement than the effects of school resources and

independent of the variable home background. Also they concluded that parents efforts tends to reduce with increase school resources, a situation they termed as “crowding out” effect of school resources.

Family factors have been sub divided by Christenson (1992) into five major components which are not rigid but prone to interventional actions to enhance effectiveness. These sub factors include: parent expectations and attributions, structure for learning, home affective environment, discipline, and parent involvement. Parents expectations and attributions has been found to have an influence on the student’s performance as it directly relates to building the student’s self context and expectancy rather than the student’s past performance (Parsons et al 1982).

Sehee & Hsiu-Zu (2005) conducted a multidimensional survey on parents involvement on student’s achievement among different ethnic groups. They concluded that there are ethnical differences on the role of parents’ involvement on student achievements. Also they found consistent indirect effects of student’s level of control and aspirations on achievement but that parent’s involvement in the light of communication and aspirations for their children directly influences the child’s educational aspiration and level of control. Thus a greater parental involvement in the education of a child will increase the child’s achievement level.

Many studies in developing countries showed school effects to be greater than family effects on achievement. Lockheed et al (1989) blamed this conclusion on flaws in the methodology used as well as the framework. They particularly sited the misspecification of what constitutes the family background by earlier studies. They used panel data from Thailand and cross sectional data from Malawi and took into consideration country specifics in accessing background. They concluded that family background was very essential in achievement and that misspecification or exclusion of the family influence makes educational programs not accommodative to indigenous family and class realities.

The role of technology, in particular computers on student achievement cannot be left out. Wenglinsky (1998) wrote a research report at the educational testing service at Princeton where he evaluated the role of computer use on mathematic results of fourth and eighth graders. He used data from the National assessment of Educational progress Math examination and analyzed home and school computer use. He concluded that availability of computers in school does not imply an increase in

achievement but rather the how and what they use it for that reflects in their achievement. This point is further emphasized by Schacter & Fagnano (1999) by saying ease and efficiency should not be the main focus for introducing computers to the learning process but rather it should be incorporated into the learning process and the pedagogy.

The effect of peers on achievement is a very tricky study as it is hard to separate this effect from other effects. Hanushek et al (2003) made this distinction by excluding student specific, home and school fixed effects from the analysis. They analyzed the reciprocal nature of peer interaction and quality of peer group was measured by past achievement models. The results show a positive relationship between peer effects and achievement though the variation was not systematic.

Meece & Holt (1993) identified three main patterns; work avoidant orientations, ego and mastery goal. The results show 3 clusters from the 257 fifth and sixth graders with the top achievers being the students with mastery goal higher than the other two goals. The students who had mastery and ego both higher than work avoidant orientation did not perform too well while the least achievers where the students that show low on both mastery and ego goals.

Plonski Patrick (2009) studied the influence on English language performance of tenth grade students in four schools in Tanzania after they received English text books from America. They used a mixed method research and their findings showed a remarkable improvement in the student's English performance. Interview analysis from the teachers and administrative staff shows a positive attitude towards more text books for the students.

This chapter has identifies the various factors that will be included in the model that will be estimated. It has also thrown some light on the existing relationships among the variables in different settings. The next chapter will introduce the field work and the area of study. It will also outline the data collection method and the data as well as the analytical model.



## **Chapter three: Methodology and study area**

### **3.0 Chapter Introduction**

The first part of this chapter will concentrate on the study site. The chosen schools for the research will be discussed in line with a brief history, the opening of the school, the location, major characteristics and performance trend. The next part will be methodology which covers the choice of data collection method, the sample size, a discussion on key variables, method of analysis and finally validity, reliability and ethical concerns on the field work carried out.

### **3.1 Study site and school choices**

This study as already noted is carried out in the Anglophone section of Cameroon and the focus will be on the secondary level of education. The Anglophone section is made up of two main regions<sup>3</sup>; the North West region and the South West region with capitals Bamenda and Buea respectively. The North West region is considerably bigger in terms of land size (17,812 Km<sup>2</sup>) than the south west region (24571 km<sup>2</sup>). There is also a significant difference in population between these regions. Despite these differences, the living standards between these two regions are almost identical and there is a high concentration of schools from the three main providers (mission, public and private) in these regions especially in the capitals of these regions.

The study is carried out in Buea which is the capital of the south west region. This town is located at the foot of mount Cameroon and has a population of 57000 people. The town has one major road that runs from the town boundary and ends up at the forest region of the mountain. The habitants live on both sides of the road and there are three main parts in the town. The first part is known as Molyko and it is the area furthest from the mountain. The second part is Great Soppo and the last part which is partly the mountain is known as Bokwango. This town is the host of the only English speaking university in the country and thus its population is made up of people from all other regions of the country.

This area has a total of 29 secondary schools; 13 public grammar and technical schools, 7mission schools and 9 private schools. The schools chosen are: Bilingual

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<sup>3</sup> These were previously known as provinces but were changed to regions by a presidential decree in 2008 as part of the decentralization process taking place within the country.

Grammar School Molyko Buea, Baptist High School Buea and Summerset Bilingual College Buea.

These schools are chosen for convenience in terms of accessibility, their popularity within the region and most importantly their willingness to participate in the research.

### **3.1.1 Government Bilingual Grammar School (BGS) Molyko Buea**

This is the oldest public school in the region and was one of the first public secondary schools opened after independence to promote bilingualism. This school was opened in 1963 in Limbe a coastal town 20 minutes from Buea. It was later moved to Molyko Buea in 1969 and was formally inaugurated by the president of the country on May 26<sup>th</sup> 1975. The school offers a complete English and French system that follows the syllabus of the Anglo Saxon system and the francophone system respectively. It has one main principal and 4 vice principals; 2 in both systems and a number of discipline masters. On average, the school has a total of 3778 students with 2163 students in the secondary school section (form 1 to form 5) and 1615 students in the high school section (lower sixth and upper sixth). This large number is backed by numerous classrooms (59), despite this large number of classrooms, there is sometimes a problem of overcrowding in some classes leading to a strain on the resources available. The school gets approximately 5million CFA from the government every semester for the running of the school. This school like all other public schools charges a tuition fee for all students. The fee is considerably low and considered affordable to all by the government. This is not the case in reality as effective learning is interrupted several times in the school year for school fees drive. This is when students who have not completed the fees are send away from school. Students in lower sixth are required to pay a total of 25000 FRS (\$50), 10000 FRS (\$20) for tuition and 15000 FRS (\$30) for PTA fees. These are the only recognized fees but students are expected to pay other minor fees like excursions within the course of the school year.

Admission into the lower sixth form is based on performance in the GCE O level and available space. Usually the base line is a pass in 4 and above GCE papers and the maximum available space is 500students. Due to the large number of students, this school's performance has not been classified among the top schools in the country or

even the town. The performance is usually below average or just over the average pass as the mean percentage pass is 56%.

### **3.1.2 Baptist High School (BHS) Great Soppo Buea**

This school was founded in 1961 by the Baptist Convention (CBC) in Cameroon as a teachers training college. This was later transformed into Baptist Boys Secondary School (BBSS) by making a formal request to the government for approval. This was approved and the school changed from BTTC to BBSS in 1975. It was a boarding school for boys and was one of the first boarding schools in the English part of the country. In 1985, it was changed into a mix sex school and was named Baptist High School Buea (BHS Buea). The school is run by a principal who is in charge of general administration along with a vice principal in charge of academics. There is one discipline master and several teachers who all live on campus to ensure smooth functioning of the boarding system. The teachers are usually graduates and some are expert teachers with years of experience moon lighting from the public schools. The pay is not bad as it is accompanied by free lodging on campus. The school reports to the educational board of the CBC which is accountable to the delegation of education in the region. The school gets some money from the government every year to the tune of about one million FRS (\$2000). They also have to pay insurance, land tax and other taxes to the government. The school fees is 52000frs but including the lab fee, PTA fee, practical's fee, book fees and boarding fee, the amount goes up to 275000frs (\$565) and above depending on the number of books signed out. The school admits based on good performance from the O levels. It requires a pass in at least four subjects and a pass in a combination of subjects that make a series in the high school. The maximum number of students that can be admitted into the lower sixth form is 160 students. The school has a total of over 900 students and performs exceptionally well in the GCE O level. They have a mean performance of 98.5% within the last five years.

### **3.1.3 Summerset Bilingual College (SUBICOL) Molyko Buea**

This is a private school that was opened in November 2006 by a group of partners. To open a school of this nature, you need to put forward an official application to the secretariat of lay private education at the ministry of secondary education. The

application entails an application to create as well as an application to open the school. The school is managed by a management board which usually comprises of the partners and run by a principal, vice principal, discipline master and teachers who are all on the school payroll. Most often these teachers in the private schools are graduates in different subjects with no official teacher training. Despite this lack of formal teacher training, they are usually good in their respective fields. Most of the teachers use the job as a means of survival after graduation with the hope of getting better employment later in life. They are usually under paid compared to the trained teachers in the public schools. This school gets some money from the government through subventions though it varies but at the same time, they pay for various licenses and taxes to the government. The school fee per student is 60000 FRS (\$120) and a lab fee of 10000 FRS (\$2) for the students that need any lab work. The school is bilingual thus has a French section though it is not yet fully developed. The school has a total of 720 students at present. An admission into the lower sixth form is based on a pass in at least 4 O level subjects with no considerations for a combination. In fact the school requires only a pass and the ability to pay the required deposit to gain admission. There is no limit to the number of students that can be admitted as provisions are made later if the number admitted exceeds the resources in the class room. The school though opened in 2006, it was first granted a GCE center status in 2008. They scored a 68.42% pass that year and a 76.4% pass in 2009 with a total of 89 students who sat for the exams.

## **3.2 Methodology**

### **3.2.1 Data collection method**

This study is based on primary data collected from a field work. The proposed sample size is relatively very large thus the main data collection instrument is a questionnaire which is administered to the students. Some secondary data will be collected from the schools and an informal semi structured interview will be used to get in depth knowledge on the various schools. The main purpose of this will be to present a clearer picture of the school's background and not any addition to the data. The principals in the three schools will be the interviewee as well as the main contact persons in the three schools.

### **3.2.2 Questionnaire**

A questionnaire is the most common method of data collection for quantitative research. It usually consists of open ended questions or close ended questions or both. This study will use more of close ended questions to get quantitative data though some open ended questions will be included to get in-depth knowledge on certain aspects. This approach is very effective when dealing with a large sample size within a limited time and budget. The questionnaire is thus the most suitable method of data collection for this study. This method of data collection though good has as main short coming reactive effects which are when the respondents portrays only what is socially desirable, (Bryman, 2004). This problem can be resolved only by further probing which is not possible in questionnaires. This study attempted to reduce the probability of this problem by including some check questions to verify some responses.

### **3.2.3 Sampling**

As mentioned above, all three schools will be selected from Buea. The public school chosen is the first established and main public school of the area; Government Bilingual High School Molyko Buea. The mission school is Baptist High School Buea chosen purely for convenience while the private school chosen is Summerset Bilingual College Buea which is a popular private school in the region. All students in the lower sixth form who took the general Certificate of Education Ordinary (GCE O) level in the previous school year will constitute the sample size. This class is chosen because it is the class immediately after the first major nationwide exam. The public school had a total of 238 students of which 191 responded to the questionnaires. The mission school had a total of 142 students of which 134 students responded. Finally in the private school 110 students with a total response of 105 responses. This gives a total of 430 students in the entire sample and a response rate of 87.7%. The lowest response rate was registered in the public school with a response rate of 80.3% while the mission and private school both had a response rate of 94.4% and 95.5% respectively.

### **3.2.4 Questionnaire Composition**

The questionnaire (see appendix) is divided into five parts, each part covers a given theme and aims to gather relevant data. The respondents are the students so the data

reflects only the view points of the students on their behavior and how they perceive their school and home environments.

The first part of the questionnaire covers the demographic background of the students. This first part asks information on the name of the school, gender and age of the respondent. The area of specialty in the Cameroonian educational system is mainly arts, science or commercial. Each specialty is marked by specific subjects and thus different educational inputs for example, laboratory needs is very essential for science students but almost irrelevant for arts and commercial student. The two main sections are the arts and science sections but some schools offer a commercial section thus the inclusion in the questionnaire. This division also reflects on future aspirations (education and work) which are linked to present school performance, thus it will be interesting to establish this relationship. Area of origin and present location are asked to know first the distance to school and secondly the demographic mobility of the students with particular interest on the movement from the French region into the English region. The area of origin will be grouped into four main regions; the two English speaking regions: North West and South West regions. The Western region which is the region between the two English speaking regions is included as a main region because of the increasing switch to English as working language though French is the official working language of the region. The last group is termed others and covers all the other regions within the country. Home location is based on the three main areas within Buea: Molyko, Great Soppo and Bokwango. All locations out of the above areas are grouped under others. Finally marital status is asked in order to know if there are any married or cohabiting students and in which of the schools.

The second part covers the student specific characteristics. It begins with the name of school attended. This is included because the lower sixth form in each school is made up of students from many different schools and not only students who attended form five there. The number of subjects passed which is the main achievement variable is asked. The next question on listing the number of subjects taken is a check question to confirm the above question. The approximate total number of hours used for studies in a day out of regular class time is asked. This number is further broken down into if they were compulsory hours set by either the parents or the school authorities and the extra hours studied which will be the student's personal initiative. Some students take extra classes to complement what they learn in class. Questions are asked concerning the duration and cost of these classes. Number and reason of

absences from school is asked. A series of questions are asked to get data on the students view point on certain aspects of school life and school expectations. A question on main goal of studying is asked to ascertain if main goal is long term or short term. The next set of questions aimed to express the level of occurrence of certain actions within the class room. The accessibility of required text books is considered here as the main extra learning aid in addition to the lectures attended. Peer pressure is a difficult concept to measure and in most studies it is captured by proxies. In this study, peer pressure is captured by the number of close friends as well as the indulgence in certain actions that are prohibited by the schools. This part is concluded on the future aspirations of the students in terms of highest desired qualification and dream job.

Part three of the questionnaire concentrates on the student's home background. Firstly, who the student lives with is asked to get an understanding of the living environment and as a check question to the marital status question in part one. The next question is on the parent's level of education and focus was on the father's level of education. Due to ambiguity in responses, mother's level of education was dropped from the questionnaire. A question was asked if the student received any help with their school work while at home. Those who received help were asked the relationship they have with the person who helped them and also the person's level of education. The next set of questions had to do with parent's occupation. The exact job was asked and then it will be grouped according to the international job classification scale. The students were then asked to tick amongst a list of possible home resources to identify their home possessions. Parent's expectations regarding the student's performance in terms of grades was asked and if they got punished for not doing well in school was also asked. Punishment here is used as a motivational factor by the parents, students work harder to get better grades to avoid the punishment. A question was asked to know how involved parents were in the student's studies from the student's point of view. Another measure of parent's involvement asked was if they participated in PTA meetings at the school. The students were asked if they could study at home comfortably and if not they were asked to give the reason for the home not being suitable for studies. They were then asked oh how they will rate the level of discipline in their homes and also how satisfied they were with the allowance they received. The last set of questions was directed towards students who had been sent away from school for fee drive. Fee drive is when students who have not completed the required

school fees as well as other compulsory fees are send away from classes till the fee is paid in full or a decided amount is paid. They were asked how many times they were send away from school and approximately how many days they were away from school.

The next part is on the school resources and the first question is about the class size. The next question is on if they had qualified teachers for all the subjects they took. In this question, qualified teachers was not in terms of teachers academic achievement but the student's perspective based on the teaching techniques used by the teachers. They were also asked the total number of subjects they did not have qualified teachers. The next question is on the need for a laboratory in any of the subjects and if they needed a lab, how well the lab was equipped to meet the learning requirements. Also the availability of a library in the school was asked along with how well the library was equipped. The students were asked approximately how many times they used the library in a month. The next questions are related to the availability and use of a computer lab. They were asked if the computer lab had internet connection, if yes and how many hours they spent on the internet in a week. The students were asked about having a health unit in school and a school counselor and to evaluate the services. These are resources that make life and decision making in the school easier for the students thus easing the learning process. Their membership in a club in school was asked which showed involvement in extracurricular activities.

The last part captures the student's perspective on the external perspective of the school. This was in terms of the first choice of school for the lower sixth form and why. If the student did not get into the first choice school, they were asked the reason why they did not get into the school. The last question was an open ended question asking the students what they think of the three forms of schools in a single word. This was to capture the vivid image they have of the three forms of school.

### **3.2.5 Variables of interest and method of analysis**

The first part of the analysis will be done with the use of the measures of central tendency (mean, median and mode). This will be used principally to compare the elemental differences between the schools. All variables from the questionnaire will be used in this analysis. Also correlation analysis will be used to show the nature of relationships between variables.



The next part of the analysis will make use of regression analysis. The model used will be in the form:

$$Y_i = A + X_1 + X_2 + X_3 + e$$

Where

$Y_i$  is the dependent variable and in this case, the number of subjects passed in the GCE O levels.

A is the autonomous variable

$X_1$  is independent variables depicting student specific characteristics and include;

- Total number of hours studied in a day in addition to the regular class time.  
This variable has a breakdown based on compulsory hours set by the school and the parents.
- Student's opinion on some school and learning aspects measured in terms of their agreement or disagreement with some phrases.
- Study goal depicted by long term or short term goals.
- Student's attitude measured by the frequency of occurrence of certain behavior pattern.
- Number of friends, friend's school performance and degree of indulgence in smoking and drinking habit.
- Highest desired qualification.
- Desired future job.

$X_2$  for variables for home background which includes:

- Father's educational level measured by highest qualification attained.
- Parent's occupation presented in groups from elementary workers at the bottom to professional and managerial post at the top.
- Home resources including TV, internet, computers etc.
- Parent's expectations on academic outcomes.
- Parent's involvement in student's studies.

$X_3$  for school resource variables which include:

- Class size,
- Library use measured by number of library visits in a month.
- Internet use measured by number of hours spends on the internet in a week.

And  $e$  is the error term

The above variables will be in the initial model but may be dropped if found not relevant to the model. The analysis will be done on the entire sample and later by schools.

### **3.2.6 Validity and reliability of data and instrument**

Reliability refers to how well your instruments can be trusted to get the desired data. Given that this study has a relatively large sample size, the choice of questionnaires is the most reliable source of data collection. Reliability within the collection method implies that a good questionnaire should give the same responses or very close responses if administered to the same sample twice. This study ensured reliability by using short and straight forward close ended questions as much as possible. The units of measurement used within the questionnaire are such that it allows the respondents to approximate as close as possible the exact response.

Validity on the hand can be ensured only on a reliable method of data collection as without reliability there is no validity. Validity refers to how well the method measures what it is intended to measure. Thus the question of validity is on the use of the method while reliability is a characteristic of the method. Validity in this study is ensured by the focus on the student's perspective and a breakdown into the major categories thus ensuring clear and consistent responses. The inclusion of some open ended questions to give more insights on certain questions increases the validity of the data collected.

### **3.2.7 Ethical concerns:**

There will be a cover letter explaining the reason for the survey and also the possible potential uses. The survey was carried out only after permission had been granted by the appropriate school authorities. Students were not expected to disclose their names and participation was voluntary. Students who expressed unwillingness to participate were excluded.

This chapter has given a picture of where the field work was carried out and the type and nature of data that has been collected. The next chapter will present the findings from the statistical analysis carried out in the SPSS statistical program.

## CHAPTER FOUR: PRESENTATION OF DATA AND STATISTICS

### 4.0 Chapter Introduction

This chapter presents analysis results of descriptive and correlation analysis of the factors. The presentation will be according to the sub sections within the questionnaire and major differences between the different schools will be highlighted. The next part will give the results of the regression models evaluated.

### 4.1 Descriptive statistics

#### 4.1.0 Background Information

As mentioned above, the study was carried out in three schools. The total number of respondents was 430 with 191 students from the public school, 134 and 105 from the mission and private schools respectively. This gives a frequency percentage of 44.4% for the public school, 31.2% for mission and 24.4% for the private school. Within this sample, there were 51.2% female students and 48.8% male students. With respect to the specialization, 58.6% of the respondents were within the arts field while 41.4% were within the science field. There is also a gender disparity with respect to specialization as seen in Chart1 below:

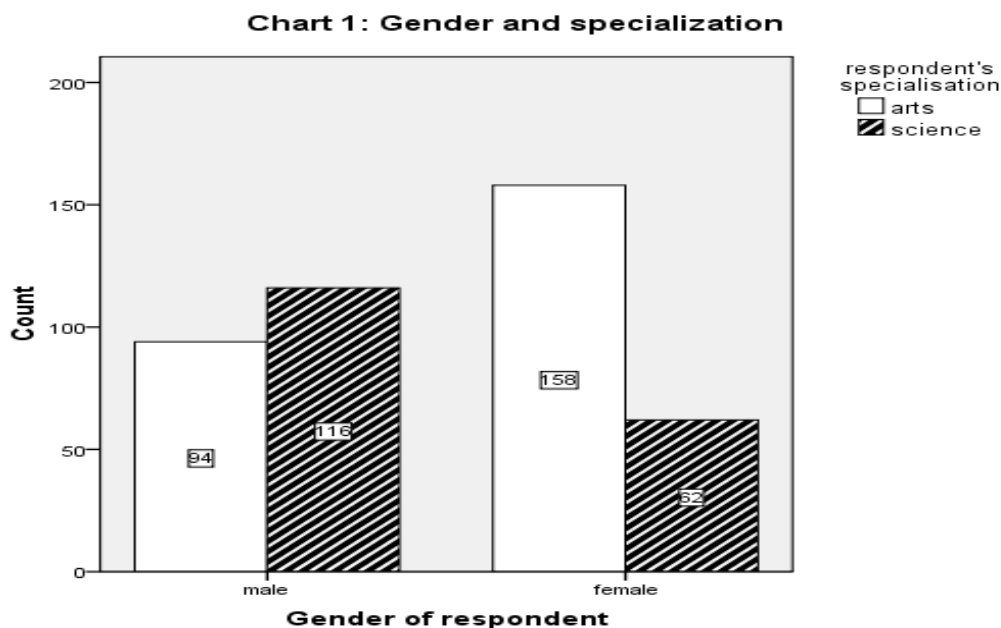


Chart 1 shows that there are more males than females who are taking the science specialization, 65.2% males as oppose to 34.8% for the females. On the other hand, of

the 252 students within the arts field, only 94 are males giving a 37.3% and a 62.7% for females. Thus there is a male domination within the science field and a corresponding female domination in the arts field within this sample. The Pearson chi square value of 32.421 depicts a significant statistical difference between gender distributions within the two specializations.

The distribution of the home location of the respondents is shown in Table 1 below:

**Table 1: Home location distribution within the sample**

School	Number	Area of residence				
		Molyko	Soppo	Bokwango	Others	Total
public school	number	77	58	26	30	191
	% within the school	40.3%	30.4%	13.6%	15.7%	100.0%
mission school	number	11	17	2	104	134
	% within the school	8.2%	12.7%	1.5%	77.6%	100.0%
private school	number	46	15	10	34	105
	% within the school	43.8%	14.3%	9.5%	32.4%	100.0%
Total	number	134	90	38	168	430
	% within the school	31.2%	20.9%	8.8%	39.1%	100.0%

From table 1 above, out of the 430 respondents, 134 students reside within the Molyko area which is also the location of two of the sample schools. This gives a total percentage of 31.2% whereas most of the students reside out of the Buea region (39.1%). Bokwango which is situated at the bottom of the mount Cameroon has the least percentage (8.8%) within the sample. This distribution varies within the different schools. Table 1 also shows that 40.3% of the respondents within the public school live within the Molyko area and 30.4% within the Great Soppo area. This is rational as these two areas are located within walking distance from the school. 13.6% and 15.7% of the 191 students in the public school live in the Bokwango and other areas out of Buea and they incur an additional transport cost to attend this school. The most likely reason for this choice rather than the school within their vicinity is the availability of more facilities in BGS Molyko. The mission school shows an opposing picture to that in the public school as 77.6% of the students come from other areas out of the Buea region. They mostly come from other regions of the country and giving the fact that it is a boarding school; no daily transport cost is incurred. Thus other reasons account for the movement to this school. The private school shows a mixture

of the above two scenarios. Though the greater part of the students lives within the Molyko area (43.8%), a considerably large part also lives out of the Buea region (32.4%). Thus the rationale for this school is a mixture of transport cost same as for the public school and other reasons as was associated with the choice of the mission school.

The tribe of origin shows the region of origin for each respondent and also the official language of the respondent. Table 2 below shows the frequency distribution with respect to the regions of origin.

**Table 2: Region of origin**

Region	Number	name of the school			
		public school	mission school	private school	Total
north west region	number	64	36	38	138
	% within the school	33.5%	26.9%	36.2%	32.1%
south west region	number	105	62	65	232
	% within the school	55.0%	46.3%	61.9%	54.0%
western region	number	20	28	0	48
	% within the school	10.5%	20.9%	.0%	11.2%
others	number	2	8	2	12
	% within the school	1.0%	6.0%	1.9%	2.8%
Total	number	191	134	105	430
	% within the school	100.0%	100.0%	100.0%	100.0%

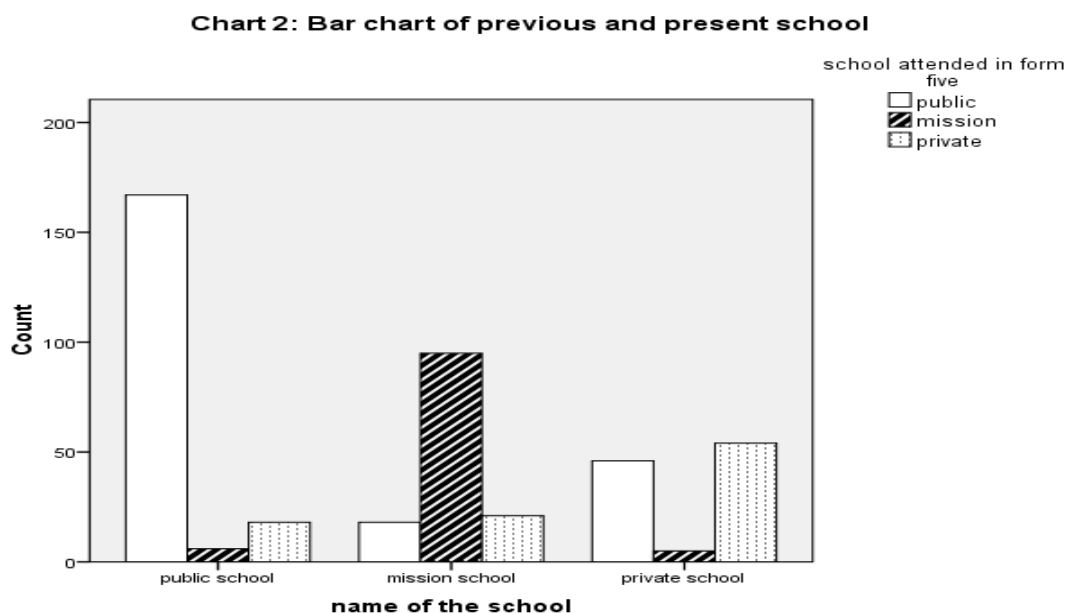
Table 2 above shows that 54% of the sample are natives of the region within which all three schools are found. The other English speaking region the North West region is the region of origin for 32.1% of the sample. 14% of the sample is made up of French speaking natives now pursuing education in the English language. Interestingly, the western region though a French region shows a larger shift to the English system than all the other French speaking regions put together. This situation can be explained by the geographical location of the western region which is between the two English speaking regions. The shift to the English system of education in this region can be explained by the close boundaries and high level interaction between this region and the English speaking regions along with the increasing role of English around the world. Table 2 above also shows variations between schools.

The private school has the highest proportion of students who are natives of the south west region (61.9%), followed by the public school (55%) and lastly the mission school (46.3%). The mission school has the highest concentration of native French speakers (26.9%), while the private school has only 1.9%. This concentration in the mission school can be explained by the fact that, a major reason for switching to an English education is as a preparation for greater opportunities to study and work out of the country. This is an ambition of the rich who also can afford the expensive education in the mission school.

The age of the respondent has a mean, mode and median value of 17 years with a minimum value of 14 years with frequency of 3 students and a maximum value of 40 years (1 student). The public school has mean median and mode of 17 years as the entire sample. The mission school has a mean age of 17 years and a median and mode values of 16 years. The private school has a median, mean and mode values of 18 years. There is only one married student within the sample and she is from the public school.

#### 4.1.1 Student specific characteristics

The first question in this section gives an overview of the different schools the students attended the previous year which is also where they wrote the O level exams. This distribution shows that 53.7% of the students attended a public school while 24.7% and 21.6% attended a mission and a private school respectively. Chart 2 below gives the mobility structure between the various schools given their present school.



From chart 2 above, most of the students from the public school continued in the public school as are the cases in the other two schools. The move from the mission school to the private and public school is almost equal where as more students leaving the public school move to the private school than the mission school. The private school has a considerable influx from the public school and very few students from the mission school. Thus based on this data one can conclude that in relative term, the mission school gets the least inflow from other schools in comparison with the public and private school. In absolute term, the public school is always leading in attendance due to its larger admissions possibility.

The number of subjects passed is the dependent variable and its distribution is shown in the table below. Table 3 below shows that the distribution has a mode of 6 subjects and a mean of 7 subjects. It also has a minimum number of 4 subjects with a frequency of 33 students and the maximum of 11 with a frequency of 27 students. The distribution is positive skewed with a skewness of 0,195 around the mean. The number of subjects passed in the various schools is also shown in this table:

**Table 3: Distribution of subjects passed within the schools**

number of subjects passed	name of the school / frequency			
	public school	mission school	private school	Total
4	14	0	19	33
5	25	1	25	51
6	29	19	39	87
7	36	23	16	75
8	35	20	3	58
9	19	25	2	46
10	27	25	1	53
11	6	21	0	27
Total	191	134	105	430

Table 3 above shows that the mission school is made up of higher achievers with only 14.9% of the students achieving below the mean and 67.9% above the mean number of subjects. On the other hand, the private school has a majority of underachievers with respect to the sample mean. 79% of the students in the private school achieved below the mean number of subjects and only 5.8% achieved above the mean. The public school shows a more even distribution with respect to the two

other scenarios as 45.4% of the students achieved above the mean and 35.8% below the mean.

The number of hours used to study in addition to the regular class time in a school day has a mean of 5 hours a day and a mode of 6 hours a day. The distribution on number of hours studied shows that one student from the mission school did not study at all out of the regular class time while 5 students from the public school put in a total of 10 study hours in addition to regular classes. The public school has a mean value of 5.73 hours and a mode and median of 6 hours. The mission school has a mean of 5.19 hours and a mode and median of 6 and 5 respectively. Lastly, the private school has a mean of 4.75 hours and a mode and median of 4. The distribution in the public school is within 2 standard deviations from the mean, while the mission school has a distribution within 1.6 standard deviations from the mean. The private school has the number of hours studied distributed within 1.7 standard deviations from the mean. These hours studied are made up of compulsory hours set by the schools, by the parents and some extra hours set by the students.

32.1% of the students said they studied within compulsory hours set by the school. These school compulsory hours range from 2 to 5 hours with a mode of 3 hours. These hours were set mostly in the mission schools with 70.9% of the students having compulsory hours set by the school. The public school has a total of 26.8% of students having compulsory hours set by the school and only 9.5% in the private school. This variable has a significant correlation coefficient of 0.332 with number of subjects passed in the entire sample. This correlation is captured in the mission school as it is the only school with a significant relationship.

18.4% of the entire students studied within compulsory hours set by their parents. The minimum number of hours set by the parents is 1 and the maximum is 8, with a mode of 3 hours. Only 4.5% of the students in the mission school have compulsory hours set by their parents while 20.4% and 33.3% of the students in the public and private schools respectively have compulsory hours set by their parents. This variable is significantly negatively correlated with achievement with a value of -0.167. This correlation as was in the case above is noticeable only in the mission school case as the other two schools do not have a significant relationship between the variables. In addition to these compulsory hours, 44.4% of the students studied extra hours. This category ranges from 1 to 6 hours with a mode of 2 hours a day. The mission school has the highest percentage of students who studied extra hours (68.7%). The public



school has a total of 29.8% students with extra study hours while the private school has 38.1% of students who studied extra hours not set by their parents or the school. This variable is positively correlated with achievement within the entire sample with a value of 0.160; much of this correlation is accounted for by the public and mission school with insignificant results from the private school.

Attending extra classes, hours attended and cost of extra classes is summarized in the table below:

**Table 4: Hours attended and cost of extra classes**

Statistics	attend extra classes	hours a week extra classes from april to may	hours a week extra classes from sep to mar	cost per hour (FRS) from sep to mar	Cost per hour (FRS) from april to may
Valid	121	117	99	81	99
Mean	1.00	5.83	5.46	137.01	164.09
Median	1.00	4.00	4.00	100.00	100.00
Mode	1	3	4	100	100
Minimum	1	1	1	13	20
Maximum	1	26	26	500	500

Table 4 above shows that only 121 students attended extra classes out of the 430 students within the sample. The mean number of hours attended between September, the beginning of the school year and March is 5.46 hours a week. The period from April to May which is nearer to the exam period (June) shows a minimal increase in the mean number of hours attended a week to 5.83. The first period has a mode of 4 hours while the period close to the exams has a mode of 3 hours a day. The maximum number of hours attended a week for both periods is 26 hours. The mean cost per hour of extra classes is 137 FRS (\$0.3) in the period from the beginning of the school year and for the period close to the exam period, there is an increase in mean cost to 164 FRS (\$0.34). The maximum cost per hour in both periods is 500 FRS (\$1). Attending extra classes is negatively and weakly correlated with number of subjects passed with a coefficient of -0.199 significant at the 0.01 level of significance. This implies that increasing the hours used for attending extra classes reduces the student's performance.

The public school has a total of 66 students who attended extra classes. The mean hours a day for the period close to the exam period is 6.51 hours while for the first

period it is 6.33 hours. The mode is 2 hours in the first period and 4 hours in the period close to the exam period. For the mission school, only 17 students attended extra classes with a mean of 5.6 hours in the first period and a reduction to 5.24 hours in the second period. The mode is 2 hours in both periods, and the maximum cost is 250FRS (\$0.5) in the first period and 200FRS (\$0.4) in the second period as oppose to 500FRS in the other schools. The private school has 38 students who took extra classes and there is an increase in mean number of hours of extra classes a day from 4.19 to 4.96 from the first to the period close to the exams. The mode in the first period is 3 hours while for the period close to the exams; it is 6 hours a day.

Out of the 430 students who took part in the survey, 290 students answered positive to have been absent from school thus giving a 67.4% absences from school. The distribution of the absences is shown in the table below:

**Table 5: Distribution of yearly absences from school**

Number of Times absent	Number	name of the school			
		public school	mission school	private school	Total
1 -5 times	number	71	54	42	167
	% within school	53.8%	61.4%	60.0%	57.6%
6 -10 times	number	29	14	17	60
	% within school	22.0%	15.9%	24.3%	20.7%
10 and above	number	32	20	11	63
	% within school	24.2%	22.7%	15.7%	21.7%
Total	number	132	88	70	290
	% within school	100.0%	100.0%	100.0%	100.0%

Table 5 shows that 57.6% of the students who were absent from school had a total of between 1 and 5 days of absences while 20,7% and 21.7% were absent between 6 and 10 days and more than 10 days respectively. The mission school registered the highest percentage absences (61.4%) between 1 and 5 days followed by the private school (60%) then the public school (53.8%). On the other end of the table, the public school has the highest percentage of absences in the 10 and above group followed by the mission school and then the private school. The private school with respect to the others has the highest percentage (24.3%) in the middle group (6-10 days).

The main reason for absences in all three schools was illness or bad health. Family problems accounts for 12.4% of total absences with highest frequency in the public

school. Lack of means of transport in terms of lack of money to pay for transport to school accounted only for 8.3% of all absences. The highest number of cases for no transport was registered in the public school (13) followed by the private school (7) and the mission school had only 1 case. The second main reason for absences from school falls under the category “others” of which the students gave the following reasons:

- Teachers not coming in for scheduled lectures thus resulting in some students not coming to school for the entire school day or in some cases many days<sup>4</sup>.
- The student’s class schedule sometimes gives a free day or some days with very few classes thus the students do not deem it necessary to come to school on such days<sup>5</sup>.
- Lack of school facilities like library and reading rooms is another reason for absences
- For the mission school, boredom in school is a cause for absences as the students in search of some excitement leave the school premises illegally.

In the questionnaire, the students were asked to give their opinions on various aspects of the school and their learning experience. They were required to give a number ranging from 1 till 5 with 1, being totally agree and 5 being totally disagree. These questions included:

- |   |   |
|---|---|
| A, school is boring.                          | B, good grade is important.                   |
| C, school is more theoretical than practical. | D, get much attention from the teacher.       |
| E, teachers are very good in what they teach. | F, learn more privately than in class.        |
| G, learn more from friends than in class.     | H, school is important irrespective of career |
| I, will not get a job without school          |   |

The mean and standard deviations of the responses to these questions according to the various schools are given in Table 6 below.

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<sup>4</sup> Coming into school and staying in for the entire school day is compulsory for all students.

<sup>5</sup> Irrespective of the class schedule students are expected to be present on campus.

**Table 6: Descriptive statistics of student's opinion**

name of the school/ stats		A	B	C	D	E	F	G	H	i
<b>Entire sample</b>	Mean	3.8	1.3	2.1	3.5	2.2	2.7	2.4	1.9	3.2
	Median	4	1	2	4	2	3	2	2	3
	Mode	5	1	2	4	2	2	2	1	5
	Std. Deviation	1.1	0.7	1	1.2	1.1	1.3	1	1.2	1.4
<b>public school</b>	Mean	3.9	1.3	2.1	3.5	2.3	2.6	2.4	1.9	3.2
	Median	4	1	2	4	2	2	2	2	3
	Mode	5	1	2	4	2	2	2	1	5
	Std. Deviation	1.1	0.6	1	1.2	1	1.3	0.9	1.2	1.5
<b>mission school</b>	Mean	3.4	1.4	2.2	3.5	2.4	2.9	2.5	1.9	3.2
	Median	3	1	2	4	2	3	2	1	3
	Mode	3	1	2	4	2	4	2	1	3
	Std. Deviation	1.2	0.9	1	1.1	1.1	1.3	1.1	1.2	1.3
<b>private school</b>	Mean	4.1	1.4	2.3	3.8	1.9	2.7	2.4	2.1	3
	Median	4	1	2	4	2	2	2	2	3
	Mode	5	1	2	5	2	2 <sup>a</sup>	2	1	5
	Std. Deviation	1	0.6	1.1	1.2	1.1	1.4	1.1	1.3	1.6

Table 6 above shows that there are only very little differences between student's opinions in the entire sample and the various schools. The trends in the entire sample for the various questions are similar to the trends in all three schools. The students generally disagree with the statement that school is boring, with the slight exception of the mission school which have some students who are undecided on the matter. All three schools are close to totally agreeing on the fact that a good grade is important. On the question of if school is theoretical or practical; all three schools agree that school is more theoretical than practical. The entire sample, mission and public schools are midway between agreeing that they get much attention from their teachers and being undecided on the matter (maybe). Only the private school students are close to agreeing that they get much attention from their teachers. The majority of the

students agree that their teachers are very good in what they teach. All three schools are close to an undecided answer on if they learn more privately than in class but closer to agreeing that they learn more from their friends than in class. All the students agree that going to school is important irrespective of future career choice but are undecided about not getting a job without education. All the responses on all the aspects in all three schools are approximately one standard deviation from the mean, thus very little variations around the mean answers above.

The main goal of studying in terms of long term and short term goals was asked and the following distribution was gotten from the responses:

**Table 7: Distribution of long term and short term goal of study**

Main goal of studying	Name of the school			
	public school	mission school	private school	Total
to get A grade	14	17	3	34
to get a pass grade	5	5	2	12
to get higher education	54	34	22	110
to get a good job in the future	118	78	78	274
Total	191	134	105	430

Table 7 above shows that 274 of the students (63.7%) have as main goal of study to have a good job in the future. Despite registering the same absolute number as the mission school in getting a good job in the future as main goal of study, the private school has the highest percentage of 74.3% in comparison to the 61.8% and 58.2% for the public and mission schools respectively. 25.5% of the students study for the purpose of achieving a high educational level in the future, thus giving a total of 89.3% of the students having a long term goal. Only 10.7% of the students have a short term goal with 7.9% having getting A grades as the main goal of studying. The mission school registers the maximum number of students with A grade as main study goal. Some 12 students study just to get a pass grade in the various subjects, least of which is from the private school. Correlating this variable with the number of subjects passed gives a Pearson correlation coefficient of -0.097 which is statistically significant. This coefficient depicts a very weak negative correlation between study goal and number of subjects passed implying that students with long term goals perform less than students with short term goals.

The next set of questions was aimed at assessing student's attitude in class and in school in general. The answers range from 1 to 5 with 1 being everyday and 5 being never. The midpoint of 3 indicates once a week. These questions include:

A, day dream in class      B, teacher acknowledges good performance      C, sleep in class

D, do not do assignment      E, ask questions in class      F, answer questions in class

G, headache after school      H, learn important things in school      I, get punished for bad conduct

**Table 8: Summary of student's attitude in class and school**

Name of the school / Statistics		A	B	C	D	E	F	G	H	I
Entire sample	Mean	3.2	2.7	3.8	3.1	2.7	2.8	2.9	1.4	3.6
	Median	4	2	4	3	2	2	3	1	4
	Mode	4	2	5	4	2	2	2	1	5
	Std. Deviation	1.3	1.2	1.2	1.4	1.3	1.2	1.3	0.9	1.3
Public school	Mean	3.2	2.7	4.1	3.1	2.6	2.8	3	1.4	3.8
	Median	4	2	4	4	2	3	3	1	4
	Mode	4	2	5	4	2	2	2	1	5
	Std. Deviation	1.3	1.2	1	1.4	1.3	1.2	1.3	.9	1.2
mission school	Mean	3	2.8	3.4	3.3	3.1	3	2.8	1.2	3.4
	Median	4	2	4	4	4	3	3	1	4
	Mode	4	2	4	4	4	2	4	1	4
	Std. Deviation	1.3	1.2	1.3	1.3	1.3	1.3	1.3	0.8	1.4
private school	Mean	3.3	2.6	3.8	2.9	2.3	2.5	2.8	1.4	3.6
	Median	4	2	4	3	2	2	3	1	4
	Mode	2	2	5	2	2	2	2	1	5
	Std. Deviation	1.3	1.3	1.1	1.4	1.2	1.2	1.3	0.9	1.3

Table 8 above as was the case in table 7 shows a great similarity between attitudes in the three schools and in the entire sample. All results are within approximately one standard deviation from the mean. In all three schools, students day dream in class or lose concentration during lectures at least once a week. In the private school, the majority of the students daydream several days a week though they have an average of once a week. Also the students get acknowledgement from their teachers for good performance at least once a week but with the majority of the students getting acknowledgement many times in a week. In all three schools, the students rarely sleep in class during lectures. On average, the students in all three schools do not do home and class assignments at least once a week. The majority in the schools rarely do not do home and class assignments with the exception of the private school where the majority of the students do not do home and class assignments several times a week. The mean for how frequently the students ask questions in class is close to once a week in the entire sample. The mission school has the majority of the students rarely asking questions in the class while the private and public school students ask questions several times a week. All three schools with the exception of the private school ask questions on average once a week but the private school students ask questions several times a week. All three schools as well as in the entire sample have most students answering questions voluntarily in class several times a week though on average they answer questions in class once a week. The students get headache after school several times in a week in the public and private school while the mission school students rarely get headache. On average, the students in all three schools get headache once a week. In all three schools, the students say they learn something important in school every day. Finally, in all three schools the students rarely get punished for bad behavior. Most of the students in the public and private school never got punished while most in the mission school rarely got punished. Among all the above aspects of attitude, only the variables daydream in class and ask questions in class have a statistical positive significant relationship with student's achievement. All the other variables do not have a significant relationship with achievement, thus combining the attitude proxies do not give a statistical relationship with the achievement variable.

The ownership of textbooks is a very important aspect in the study process. Of the 430 students who responded, 175 students had access to all the required text books. 104 of these students are in the mission school while 30 are in the public school and

41 in the private school. Among the 255 students who did not have all the required text books, 21 students had access to no required text books, all of which are from the public school. The mean number of books owned is 3 books and the maximum number owned is 8 books. Some books were also borrowed. The maximum number of books borrowed was 8 books by 1 student in the public school. The mean number of books borrowed is 1 book. The public school has the highest proportion of borrowed and owned books among those who did not have all the required texts. The variable access to books is positively correlated with number of subjects passed with a coefficient of 0.142 and it is statistically significant. Thus succeeding in more subjects is associated with accessing more books.

Peer pressure in this study was measured by number of close friends and if they passed, involvement in drinking and smoking along with friends. The variable number of close friends has the following distribution:

**Table 9: Distribution of number of close friends**

Number of friends	Name of the school			
	public school	mission school	private school	Total
0 - 5 friends	158	121	92	371
6 - 10 friends	27	12	11	50
11 and above friends	6	1	2	9
Total	191	134	105	430

Table 9 shows that most of the students had between 0 and 5 close friends. Only 9 students with 6 from the public school had over 10 close friends. This variable is significantly negatively weakly correlated (-0.04) with the achievement variable. Increasing the number of close friends will lead to a drop in performance for the students within this sample.

The next variable of interest is if the friends passed their final exams and this gives the following responses.



**Table 10: Distribution of friend's performance**

Friends pass		name of the school			
		public school	mission school	private school	Total
All	Number	28	18	16	62
	% within school	14.7%	13.4%	15.2%	14.4%
Some	Number	99	99	53	251
	% within school	51.8%	73.9%	50.5%	58.4%
None	Number	64	17	36	117
	% within school	33.5%	12.7%	34.3%	27.2%
Total	Number	191	134	105	430
	% within school	100.0%	100.0%	100.0%	100.0%

Table 10 above shows that 27.2% of the respondents had friends who did not pass their final exams at all, while 58.4% have friends who passed and some who failed their final exams. 14.4% have friends who all passed their final exams and most of this group is in the public and private schools. Most of the respondents in the mission school had a combination of friends who failed and some who passed. This variable is negatively correlated (-0.119) with number of subjects passed and it is statistically significant. This means that those who had friends that none of them passed their final exams performed badly in their own exams than those who had friends who all passed their final exams.

Drinking alcohol is a variable that is used as a proxy for peer pressure and of the 430 respondents, 90 responded yes to drinking alcohol of which 41 are in the public school and 25 and 24 in the mission and private schools respectively. The level of consumption in terms of number of times consumed in a month shows that 97% of consumption was between 0 and 5 times in a month and only 3 students consumed alcohol over 10 times in a month. This variable has no significant relationship with the achievement variable. 84.4% of those who drank did not drink with their close friends, while only 9.3% and 6.3% drank with their close friends and some of their friends respectively.

Smoking cigarette is another proxy for peer pressure. Only 9 students smoke cigarettes, 3 in the public school, 4 in the mission school and 2 in the private school. 6

of these students smoke less than 5 sticks a day and 3 more than five sticks a day. Only 3 of these smokers smoke with some or all of their close friends. This variable has no correlation with number of subjects passed.

The next variable in the student specific characteristic is the highest desired qualification. Table 11 below gives the distribution of highest desired qualification.

**Table 11: Distribution of highest desired qualification**

Highest desired qualification/Number		Name of the school			
		public school	mission school	private school	Total
A level	Number	9	2	5	16
	% within school	4.7%	1.5%	4.8%	3.7%
bachelor	Number	42	22	48	112
	% within school	22.0%	16.4%	45.7%	26.0%
masters	Number	58	47	40	145
	% within school	30.4%	35.1%	38.1%	33.7%
PhD and higher	Number	82	63	12	157
	% within school	42.9%	47.0%	11.4%	36.5%
Total	Number	191	134	105	430
	% within school	100.0%	100.0%	100.0%	100.0%

From table 11 above, most of the students aim towards a Ph. D (36.5%) and the least percentage of the students desired to end at the A level (3.7%). The mission and public school both have as main desired qualification the Ph. D level while the private school has the Bachelor level (45.7%) as the most desired level of education, though a good percentage (38.1%) desires the Masters level. This variable has a positive correlation coefficient of 0.454 with number of subjects passed and it is statistically significant. Thus, increasing the desired future qualification, say from masters to PhD, increases the number of subjects passed.

Finally, there is the question on desired future occupation which is given in the distribution in table 12 below.

Table 12: **Distribution of dream job**

Dream job		name of the school			
		public school	mission school	private school	Total
senior officials and managers	Number	8	4	1	13
	% within school	4.4%	3.0%	1.0%	3.1%
professionals	Number	132	109	23	264
	% within school	72.5%	82.0%	23.0%	63.6%
civil servants	Number	27	18	70	115
	% within school	14.8%	13.5%	70.0%	27.7%
service workers	Number	14	1	5	20
	% within school	7.7%	.8%	5.0%	4.8%
business/trader	Number	1	1	0	2
	% within school	.5%	.8%	.0%	.5%
elementary workers	Number	0	0	1	1
	% within school	.0%	.0%	1.0%	.2%
Total	Number	182	133	100	415
	% within school	100.0%	100.0%	100.0%	100.0%

Table 12 above shows that 63.6% of the students have professional jobs as their dream jobs. Most of these students are from the public and mission schools accounting for 72.5% and 82% respectively. Most of the private school students (70%) want to be civil servants. 2 students want to be traders and 1 student from the private school want to be an elementary worker in the future. In all, most students want to be in the civil service or a professional and very few want to be senior officials on the one hand and traders/ elementary workers on the other hand. This variable has a positive correlation coefficient (0.338) with achievement. This correlation coefficient shows that students who desire to be professionals and other high skilled workers in the future perform better than those who aimed to work in less skilled jobs like trading.

#### 4.1.2: Home background

The first question seeks to know who the respondent lives with, nuclear family or extended family. 64.4% of the students live in a nuclear family while 35.3% live in an extended family situation. Only the one married student in the public School lives with her spouse and children. The distribution in the public and mission school is almost identical for nuclear and extended family while the private school has more students in the nuclear family structure and less in the extended family structure as compared to the other two schools.

Father's level of education is the next question and has the following distribution:

Table 13: **Distribution of father's educational level**

Fathers educational level		name of the school			
		public school	mission school	private school	Total
no education	Number	13	1	5	19
	% within school	7.6%	.8%	5.4%	4.9%
primary education	Number	51	7	33	91
	% within school	29.7%	5.8%	35.9%	23.7%
lower secondary education	Number	7	1	1	9
	% within school	4.1%	.8%	1.1%	2.3%
upper secondary education	Number	10	5	12	27
	% within school	5.8%	4.2%	13.0%	7.0%
high school education	Number	36	15	17	68
	% within school	20.9%	12.5%	18.5%	17.7%
graduate education	Number	38	60	21	119
	% within school	22.1%	50.0%	22.8%	31.0%
Post graduate education	Number	17	31	3	51
	% within school	9.9%	25.8%	3.3%	13.3%
Total	Number	172	120	92	384
	% within school	100.0%	100.0%	100.0%	100.0%

Table 13 above shows that 4.9% of the respondent's fathers attended no formal education, while 13.3% of them attended post graduate education. The majority of the fathers attended graduate education thus giving a 44.3% higher education attendance. There are more fathers with no education in the public school than both in the mission and private schools. In the public school, the majority of the fathers (29.7%) have

attended only the primary level of education but 32% have at least attended the graduate level of education. The mission school has a rosier picture as compared to the public school with only 0.8% with no education and 75.8% having attended at least the graduate level of education. The private school has a similar situation to that in the public school with 35.9% having just the primary school education and 26.1% having attended university education. This variable is positively correlated with number of subjects passed with a correlation coefficient of 0.265. Thus, the higher the education attained by the parents, the higher the student's performance.

The next variables relate to getting help with school work at home and from who and the help's level of education. 292 students answered yes to getting help with school work at home giving a total of 67.9%. Among these students, 136 are from the public school and 78 students each come from the private and mission school. These students got help from different people with different relationship to them. Most of the students got help from their siblings (50.3%), others from their parents (22.3%) and also from extended family (13%) and others, mostly friends (14.4%). In comparison between schools, the mission school students get help from their parents and friends more than the students in the public and private schools. The majority of those who helped the students at home have high school and graduate education. There are 2 cases in the lower secondary school which is ambiguous as they are helping the students with a level above their highest attended education. 6.2% of those who helped in the mission and public school have attended post graduate education. This variable has no significant relationship with achievement within this sample.

Parents and spouse occupation are the next variables of interest. The variable spouse occupation was dropped due to very limited entries. 87% of the students within sample said their fathers were employed or had a job. 13% of the students said their fathers were not presently employed (on retirement), the most of the students with retired fathers were within the mission school (36 out of 55 students). There were 7 missing cases all of which were cases of bereaved fathers. Table 14 below shows that the majority of the fathers are civil servants and the least are senior officials and managers. The fathers to the public school students are mostly civil servants and elementary workers, while the mission school has the highest number of professionals (69 out of 108) and also a good number of civil servants (32). The private school has fathers who are predominantly civil servants, there is no father who is a senior official but there are 14 fathers who are professionals. The mission school

has the least number of service workers, traders and elementary workers followed by the private school and the majority in these categories is found in the public school. This variable has a positive correlation coefficient (0.205) with number of subjects passed. This shows that fathers who are employed in highly skilled jobs have children who perform better than those who have fathers in less skilled jobs.

**Table 14: Distribution of father's occupation**

Father's occupation		name of the school			
		public school	mission school	private school	Total
senior officials and managers	Number	4	4	0	8
	% within school	2.6%	3.3%	.0%	2.2%
professionals	Number	25	69	14	108
	% within school	16.2%	57.0%	15.1%	29.3%
civil servants	Number	55	32	43	130
	% within school	35.7%	26.4%	46.2%	35.3%
service workers	Number	21	5	10	36
	% within school	13.6%	4.1%	10.8%	9.8%
business/trader	Number	12	8	11	31
	% within school	7.8%	6.6%	11.8%	8.4%
elementary workers	Number	37	3	15	55
	% within school	24.0%	2.5%	16.1%	14.9%
Total	Number	154	121	93	368
	% within school	100.0%	100.0%	100.0%	100.0%

Mother's occupation on the other shows that 65.3% of the students have employed mothers, while 34.7% of the student's mothers have no job. The mission school and private school both account for over 40% each of mothers without any occupation. Table 15 below shows that 39.1% of the mothers work within the civil service sector of the country. The mission school has the highest number of mothers both in the civil service and in the professional category. There is only one mother who is a senior official and she is a parent in the mission school. This distribution has a good number of entries in the service, traders and elementary workers categories as compared to the case of the fathers above. This variable has a correlation coefficient of 0.279. Increasing from a less skilled job to a skilled job for the mother increases the student's performance in their exams. Correlating this variable with the student's

desired job gives a significant correlation coefficient of 0.19 indication appositive social movement between the children and their mothers. A correlation with father's level of education and students desired job also gives a positive significant coefficient of 0.15. Thus there is a link though not very strong between children's desired job and parent's job.

**Table15: Distribution of mother's occupation**

Mother's occupation		name of the school			
		public school	mission school	private school	Total
senior officials and managers	Number	0	1	0	1
	% within school	.0%	.9%	.0%	.4%
professionals	Number	5	24	3	32
	% within school	4.5%	22.4%	4.8%	11.4%
civil servants	Number	32	61	17	110
	% within school	28.6%	57.0%	27.4%	39.1%
service workers	Number	14	4	13	31
	% within school	12.5%	3.7%	21.0%	11.0%
business/trader	Number	21	14	16	51
	% within school	18.8%	13.1%	25.8%	18.1%
elementary workers	Number	40	3	13	56
	% within school	35.7%	2.8%	21.0%	19.9%
Total	Number	112	107	62	281
	% within school	100.0%	100.0%	100.0%	100.0%

Resources at home were asked separately and the students were expected to tick the possessions they had at home. These possessions include; TV, cable TV, computer, DVD, internet and video games. These possessions were grouped as one by summing the number of possessions owned by each student. 5.4% of the students own no listed possessions at home, most of which are from the public school. Most of the students (25.4%), owned two of the listed possessions (TV and cable TV), while only 1.2% own all six of the listed possessions in their homes. The mean number of possessions owned is 3 and the median is also 3. The majority of the mission school students (36.6%), own 4 of the 6 listed possessions. This variable has a positive correlation coefficient of 0.288 with achievement, implying that students achieve better when they have more possessions at home.

The variable parent's expectation on grades is computed from adding father's expectations and mother's expectations. The distribution of this variable is shown in Table 16 below. From the table, 60.2% of the parents expect high grades from their children while 2.4% of the parents did not care. A good number of parents (31.1%) expected average grades from their children, mostly in the public and private schools. The mission school registers the highest percentage of parents both in the high grades expectation group and the "did not care" group compared to the other two schools. This variable has a correlation coefficient of 0.23 with achievement; it reflects a positive correlation between parent's expectations and student achievement. Students perform better when their parents expect high grades from them than when their parents do not care or expect low grades. Within the schools, the public and private school both have significant positive relationship between parent's expectations and student achievement. There is no statistical significant relationship between these two variables in the mission school.

**Table 16: Distribution of parent's expectations on grade**

Parent's expectation		Name of the school			
		public school	mission school	private school	Total
high grades	Number	98	93	65	256
	% within school	51.6%	69.4%	64.4%	60.2%
average grades	Number	74	25	33	132
	% within school	38.9%	18.7%	32.7%	31.1%
low grades	Number	14	11	2	27
	% within school	7.4%	8.2%	2.0%	6.4%
did not care	Number	4	5	1	10
	% within school	2.1%	3.7%	1.0%	2.4%
Total	Number	190	134	101	425
	% within school	100.0%	100.0%	100.0%	100.0%

The variable relating to if the students got any form of punishment from their parents if they did not perform well in school shows that 75.3% of the students were not punished for not doing well. Among the 24.6% that were punished, 50% were from the public school, while 27.4% and 22.6% were from the private and mission schools respectively. This variable is significantly negatively correlated with achievement with a coefficient of -0.119. This means that punishing students for not



having good grades in school did not help to improve their grades but rather leads to a lower performance form the student.

Parent's involvement in their children's studies is the next variable and was computed by summing involvement scores for fathers and mothers.

**Table 17: Parent's involvement in student's studies**

Parent's involvement		Name of the school			
		public school	mission school	private school	Total
very involved	Number	49	51	51	151
	% within school	25.8%	38.1%	50.5%	35.5%
averagely involved	Number	111	72	47	230
	% within school	58.4%	53.7%	46.5%	54.1%
not involved	Number	30	11	3	44
	% within school	15.8%	8.2%	3.0%	10.4%
Total	Number	190	134	101	425
	% within school	100.0%	100.0%	100.0%	100.0%

Table 17 above shows that 54.1% of the parents are averagely involved in their children's education. Some parents are not involved at all in their children's education, most of which are from the public school. The public school and mission school have the same trend of most parents being averagely involved, then very involved and lastly not involved. The private school has a different trend where by half of the parents are very involved in their children's education. This variable is highly correlated with the variable parents attending PTA meetings in their children's schools.

Most parents (54.2%) do not attend all PTA meeting in their children's schools. Only 19.3% of the parents attend all PTA meetings, most of which are in the private school. 26.5% of the parents never attend any PTA meeting most of which are in the mission school followed by the public school and lastly the private school. This variable is significantly positively correlated with student's achievement thus increasing the frequency of attending PTA meeting which is a reflection of increase involvement by the parents to boosts student's achievement.

How comfortable their homes were for studies gave a 70.6% response of home is comfortable for studies. 29.4% said their homes were not comfortable for studies of which 44% were from the mission school. The reasons given for their homes not being comfortable for studying were:

- Distractions from some of the possessions in the house like TV and video games.
- Too much house work to do so little or no time for studies.
- Lack of study facilities like tables and chairs.
- House is too crowded with extended family so no space for studying.
- The environment is generally noisy from music and playing children making studying very difficult.

The level of control (discipline) in the homes shows a similar pattern in all three schools. 53% of the students have high discipline levels in their homes while 4.4% have low discipline levels in their homes. The highest percentage is in the high discipline group followed by average and lastly low discipline levels in all three schools.

The next variable is on level of satisfaction with allowance from parents and sponsors. This variable is shown in Table 18 below. Slightly over half of the students are highly satisfied with their allowance while 14.2% of the students are not satisfied with their allowance. The mission school are the most satisfied with their allowance compared to the other two schools. Only 9% of the mission school students are not satisfied with their allowance while 165 of the students in both the private and public schools are not satisfied with their allowance. In all, the public school is the least satisfied with their allowance compared to the other schools. This variable has no significant relationship with the achievement variable

**Table 18: Distribution on satisfaction with allowance**

Level of satisfaction with allowance		name of the school			
		public school	mission school	private school	Total
low	Number	32	12	17	61
	% within school	16.8%	9.0%	16.2%	14.2%
average	Number	68	49	33	150
	% within school	35.6%	36.6%	31.4%	34.9%
high	Number	91	73	55	219
	% within school	47.6%	54.5%	52.4%	50.9%
Total	Number	191	134	105	430
	% within school	100.0%	100.0%	100.0%	100.0%

Send away from school because of incomplete payment of necessary fees is the focus of the next questions. The number of times students were sent home in the entire school year has a maximum of 6 times and the mean number of times is 1 time. 53.7% of the students were never sent home for fees while 20% were sent home only 1 time in the school year. Most of the students were sent home 2 times and below in all three schools but the public school has the highest number of cases over 2 times.

The average number of days the students did not participate in lectures each time they were sent away from school is given in the table below:

**Table 19: Distribution on average number of days away from school**

Number of days away		name of the school			
		public school	mission school	private school	Total
1 to 5 days	Number	57	56	39	152
	% within school	70.4%	88.9%	73.6%	77.2%
6 to 10 days	Number	14	6	12	32
	% within school	17.3%	9.5%	22.6%	16.2%
11 and above days	Number	10	1	2	13
	% within school	12.3%	1.6%	3.8%	6.6%
Total	Number	81	63	53	197
	% within school	100.0%	100.0%	100.0%	100.0%

Table 19 above shows that most students (77.2%) were away for less than 5 days. 6.6% of the students were away for over 11 days most of them from the public school, while 16.2% were away between 5 and 10 days. The mission school has the best distribution in comparison with the other schools as they have only 7 students who were absent over 6 days on average. The worst scenario is in the public school. This variable has a correlation coefficient of -0.148 indicating a negative correlation between number of days away and student achievement. Thus the more days the students spend away from school, the worst their performance.

### 4.1.3: School resources

The first question in this section is on class size. This variable has a mean of 87 students and a mode of 57 students in the entire sample. The maximum number is 199 students and the minimum number is 20 students in a class. This variable has the following statistics for the various schools.

Table 20: **Summary statistics of class size**

Statistics/ school	Public school	Mission school	Private school
Mean	95	78	83
Median	95	75	75
Mode	100	75	57
Minimum	22	20	25
Maximum	198	186	199

Table 20 above shows that the mean in all three schools was under a 100 students in the class, with the least mean in the mission school and the highest in the public school. 66.1% of the students were in classes with less than 100 students but over 50 students, while 2.8% were in very large classes with over 150 students. The public school had the most number of students in classes over a 100 students while the mission school had the least.

Having qualified teachers in the various subjects the students took was the focus of the next question. 29.1% of the students said they did not have qualified teachers in all the subjects they took. Among these students, 53.5% are from the public school, while 26% and 20.5% are from the mission and private schools respectively. The private school has the least number of students with unqualified teachers in one subject or more. The mode of the distribution for number of subjects lacking qualified teachers is 2, with a mean number of 1 and a maximum of 5 subjects. 11.8% of the students said they lack good teachers in 4 and more subjects with the greatest proportion in the private school (15.3%). This variable is negatively correlated with achievement with a coefficient of -0.084. This result implies that the more the number of subjects in which the students do not have good teachers, the less their achievement.

Some subjects within the science field like biology and chemistry required work in a laboratory (lab) as part of the syllabus. This implies that they needed access to an equipped lab to meet this aspect of the syllabus in these science subjects. 40.7% of the

students within the entire sample needed a lab for one or more of the subjects taken. The mission school had over 50% of students who required lab work and thus a lab, while the private and public school had 21% and 44.9% of the students who needed a lab respectively. The question of how well the lab was equipped is the next variable of interest and it has the following distribution:

**Table 21: Distribution of access to equipped lab**

How equipped was lab?		Name of the school			
		public school	mission school	private school	Total
not equipped	Number	47	16	14	77
	% within school	47.5%	23.2%	66.7%	40.7%
partially equipped	Number	24	17	6	47
	% within school	24.2%	24.6%	28.6%	24.9%
Well equipped	Number	28	36	1	65
	% within school	28.3%	52.2%	4.8%	34.4%
Total	Number	99	69	21	189
	% within school	100.0%	100.0%	100.0%	100.0%

Table 21 above shows that 40.7% of the students who needed a lab as part of their school work did not have access to an equipped lab. On the one hand, most of the students in the public school (47.5%) and the private school (66.7%) did not have access to an equipped lab. On the other hand, 52.2% of the mission school students had access to an equipped lab. Some 24.9% of the sample had access to a partially equipped lab.

The availability of a library in the school is the next question. From the entire sample, 78.6% of the students have a library in their school with 82.6%, 94% and 51.4% in the public, mission and private schools respectively. 54.5% of the libraries were partially equipped as opposed to 34.7% which were well equipped. The exception to this scenario was in the case of the private school that had more well equipped libraries (50%) than averagely equipped libraries (40.7%). The public school had the highest proportion of badly equipped libraries.

The number of times students visited the library in a month shows that the mean number of visits is 5 times while the mode is 0 times. The maximum number of times is 25 times. 75 students did not visit the library at all, while 174 students visited the library between 1 and 5 times in a month. 11 students visited the library over 20

times, 7 from the public school and 4 from the mission school. In total the public school had 165 visits in a month while the mission and private school had 126 and 54 respectively. This variable has a 0.089 correlation significant coefficient with the achievement variable. The higher the number of times the student visits the library, the better the student's performance.

Within the sample, 70.9% of the students said they had a computer lab in their school. Within this total percentage, 46.4%, 41.4% and 12.2% were in the public, mission and private schools respectively. In these schools, some students did not use the computer lab at all while some students used it 26 times in a month. The mean time of usage is 3 times and the median is 1 time. Within this sample, 51.9% of the computer labs had internet access, with 47.3% in the mission school, 42.7% and 10% in the public and private schools respectively. The table below gives the use of the internet in the various schools.

**Table 22: Distribution of use of internet**

Use of internet		name of the school			
		public school	mission school	private school	Total
not allowed to use	Count	59	50	18	127
	% within school	41.8%	39.7%	47.4%	41.6%
study	Count	68	42	12	122
	% within school	48.2%	33.3%	31.6%	40.0%
chatting	Count	6	15	5	26
	% within school	4.3%	11.9%	13.2%	8.5%
study and chatting	Count	8	19	3	30
	% within school	5.7%	15.1%	7.9%	9.8%
Total	Count	141	126	38	305
	% within school	100.0%	100.0%	100.0%	100.0%

Table 22 shows that 41.6% of the students were not allowed to use the internet though it was available. 40% used it for studying and 8.5% for chatting. Most of the students in the public school used the internet for studying while in the mission and private school, most of the students were not allowed to use the internet. The public school students had the least percentage of students who used the internet for chatting and the most percentage was in the private school. Some students spend no time on the internet in a week while others spend up to 14hours on the internet in a week. The

mean number of hours spend on the internet is 1 hour. The number of hours spend on the internet is positively correlated with achievement with a coefficient of 0.207. Increasing the number of hours spend on the internet in a week will increase the student's performance.

Having a health unit in the school was the response of 72.3% of the students within the sample with 46%, 40.2% and 13.8% in the public, mission and private schools respectively. Thus over 50% of the private schools that the students attended in the year they took their final exams did not have a health unit. Counseling services was available in 90.7% of the schools. The public school had the highest proportion of 94.7% followed by the private school (90.5%) and finally the mission school (85.1%). The services of these counselors were rated by the students and 49.9% of the students said the services were good with over 50% from the public and mission school each. Some 3.6% of the students said the services were bad with the majority from the private school. The others said the services were average.

Involvement in extracurricular activities in the form of clubs had a 49.8% yes response with the majority from the mission school (57.1%). The public and the private schools had 46.8% and 45.7% respectively. These clubs included mainly sports club especially football club, music club mainly the school choir and the drama club for entertainment during social events.

#### **4.1.4: Choice of school**

This subsection covers the student's first choice of school for high school and why. After the secondary level where the students write the final exams, they have the choice of going to the same school where they attended the secondary school or moving to another school to attend the high school level. Some students move to other schools within the same school type (from a public school to another public) or to a new school in another school type (from a public school to a mission school). The distribution below gives the students first choices of school for high school.

**Table 23: Distribution of first choice of school**

First choice		name of the school			
		public school	mission school	private school	Total
public	Number	137	2	14	153
	% within school	72.5%	1.5%	13.5%	35.8%
mission	Number	35	127	15	177
	% within school	18.5%	94.8%	14.4%	41.5%
private	Number	17	5	75	97
	% within school	9.0%	3.7%	72.1%	22.7%
Total	Number	189	134	104	427
	% within school	100.0%	100.0%	100.0%	100.0%

Table 23above shows that 35.8% of the students had a public school as their first choice of school with 72.5% of these students originally from a public school. Only 2 students from the mission school wanted to go to a public school, while 13.5% from the private school had a public school as first choice. A mission school was the first choice for 41.5% of the students, with a majority of 94.8% from the mission school and 18.5% and 14.4% from the public and private schools respectively. The private school was the least favorite in terms of choices for high school. Only 3.7% of those in the mission school wanted to go to a private school and only 9% from the public school. 72.1% of those who wanted to go to a private school were already in a private school. The main reasons for the above choices given by the students can be grouped into the following:

- Students remain in their respective schools because they are familiar with the teachers, school environment and have their friends in that school.
- Students change schools because of better facilities in other school especially laboratories for the different science subjects.
- Students change school because they want a new experience and a break from their previous school that they considered too strict.
- Students change school because of the reputation (intellectual and moral) of the best schools especially the mission schools, so they want to be a part of it.

The first choices are not always where the students end up. The distribution below shows those who got into their first choices and those who did not.



Table 24: **Distribution of entrance into first choice of school**

Got in?		first choice of school			
		public	mission	private	Total
no	Number	28	76	26	130
	% within school	18.3%	42.9%	26.8%	30.4%
yes	Number	125	101	71	297
	% within school	81.7%	57.1%	73.2%	69.6%
Total	Number	153	177	97	427
	% within school	100.0%	100.0%	100.0%	100.0%

Table 24 shows that 30.4% of the students did not get into their first choice of school. 81.7% of those who wanted to get into the public school got in, while 18.3% did not get in. The main reasons they gave for not getting in were:

- Their parent's refusal to sponsor them in a public school as they preferred a private or mission school.
- Another reason for not getting into a public school was the lack of a place in the public school in the nearby vicinity. Thus they will rather attend a private school close to home than another public school far from their homes.

A good part (42.9%) of those who wanted to go to a mission school did not get into the schools. The reasons were:

- Too expensive so some parents cannot afford the cost.
- Lack of space as the mission schools has the minimum intake per class as compared to the other two schools.

The private school had a 26.8% of students who did not get into their first choice of school. The main reasons were:

- Parents' objection to private schools as they prefer the mission schools.
- Cost (too expensive for some parents to afford).

The last question was to capture words that best describe the various schools from the student's perspective. The following summarizes the various responses:

- Cost: mission school is expensive, private is moderate and public is cheap.
- Discipline: mission is highest, public is average and private is not disciplined.
- Class size: mission is small; private is average and public is a crowd.

- Seriousness: mission is best, private is second and public is last.
- Qualified teachers: Public has most, mission has many and private has some.

## 4.2 Inferential statistics

This section covers the regression analysis to determine causal effect between the various independent variables and the achievement variable. The ordinary least square (OLS) analysis will be used.

### 4.2.0 OLS analysis for the entire sample

The table below gives the results of the regression analysis, with the corresponding t values and significant levels.

Table 25: OLS results for the entire sample

Variables	Standardized Coefficients	t
Number of hours studied in a day	.168a	3.891
number of compulsory hours set by school	.225a	4.096
compulsory hours set by parents	-.123b	-2.223
main goal of studying	-.128	-1.476
number of close friends	-.014	-.484
highest desired qualification	.716a	7.690
dream job	.425a	3.393
fathers level of education	.013	.655
fathers occupation	.064	.846
mothers occupation	.116	1.388
resources	.137b	2.077
Parents expectations	.037	.548
Parents involvement	.025	.317
how many days you were away for fees	.028	1.174
number of students in class (class size)	.000	-.285
how many times use library in a month	.022	1.504
ask questions in class	.167a	2.839
use of the internet in a week	.122a	2.631

$R^2 = 0.40$ , a=significant at 5% and b=significant at 10% level of significance,  $F=15.6$

Table 25 above shows that the variables; number of hours studied, compulsory hours set by the school, compulsory study hours set by parents, desired future job and qualification, resources, ask questions in class and use of the internet are all significantly related to achievement. Among these variables, only the variable compulsory hours set by the parents is negatively related to the achievement variable. This implies that increasing the number of hours set by the parents to study by one hour decreases the number of subjects passed by 0.123. The same holds true for all other positive coefficients, thus increasing the number of hours s set by the school to study in a day by one hour will increases the number of subjects passed by 0.225. This model explains 40% of variances in the dependent variable.

#### 4.2.1 OLS analysis for the public schools

Table 26: OLS results for the public school

Variables	Standardized Coefficients	t
Number of hours studied in a day	.265a	4.397
number of compulsory hours set by school	.074	.741
compulsory hours set by parents	-.052	-.646
main goal of studying	-.171	-1.225
number of close friends	-.048	-1.028
highest desired qualification	.814a	6.136
dream job	.026	.145
fathers level of education	.011	.390
fathers occupation	.142	1.184
mothers occupation	.107	.764
resources	-.030	-.296
Parents expectations	.065	.595
Parents involvement	-.064	-.556
how many days you were away for fees	.038	1.206
number of students in class (class size)	.002	.582
how many times use library in a month	.053a	2.554
ask questions in class	.219b	2.347
use of the internet in a week	-.011	-.169

$R^2=0.35$ , a=significant at 5% level of significance,  $F=5.1$

Table 26 above shows that number of hours studied in a day, highest desired qualification, how many times used library in a month and ask questions in class are all significantly related to achievement. All of these variables are positively related to the achievement variable. This implies that increasing the number of times the student visits the library in a month by a day, will increase the number of subjects passed by 0.053. This model has an R squared value of 0.35 meaning it explains 35% of variances in achievement in the public school.

#### 4.2.2 OLS analysis for the mission schools

Table 27: OLS results for the mission school

Variables	Standardized Coefficients	t
Number of hours studied in a day	-.025	-.301
number of compulsory hours set by school	.094	.932
compulsory hours set by parents	-.524a	-2.762
main goal of studying	-.081	-.607
number of close friends	-.019	-.334
highest desired qualification	.512a	2.807
dream job	.905a	3.123
fathers level of education	-.022	-.481
fathers occupation	-.117	-.784
mothers occupation	.188	1.181
resources	.210	1.345
Parents expectations	.102	.919
Parents involvement	-.022	-.144
how many days you were away for fees	-.051	-.921
number of students in class (class size)	-.005	-.969
how many times use library in a month	.001	.056
ask questions in class	.205a	2.590
use of the internet in a week	.107	1.050

$R^2=0.35$ , a=significant at 5% and b=significant at 10% level of significance,  $F=3.4$

Table 27 above shows that compulsory hours set by the parents, desired future qualification and job and ask questions in class are all significantly related to the

achievement variable. With the exception of the variable compulsory hours set by the parents, all the other variables are positively related to the achievement variable. This implies that increasing the desired highest qualification by one unit (from a bachelor to a masters degree), will increase the number of subjects passed by 0.512 and vice versa. This model has an R squared value of 0.35 meaning it explains 35% of changes in achievement in the mission school.

### 4.2.3 OLS analysis for the private schools

The above model for the entire sample and the other two schools did not give a significant model in the case of the private school. With an overall insignificant model, no relationships were found significant in the model. Variables with the highest insignificant levels were dropped from the model. The resulting model was statistically significant and is presented in Table 28 below.

Table 28: OLS results for the private school

Variables	Standardized Coefficients	t
Number of hours studied in a day	.098	1.320
highest desired qualification	.106	.545
dream job	.485b	2.009
fathers occupation	.089	.832
mothers occupation	-.090	-.657
resources	.148b	1.613
how many days you were away for fees	-.016	-.376
number of students in class (class size)	.003	.903

$R^2=0.16$ , a=significant at 5% and b=significant at 10% level of significance,  $F=2.2$

Table 28 above shows that only the student's desired occupation and the home possessions have a significant relationship with achievement. Increasing the level of skills in the student's desired future job increases the performance by 0.5 subjects. This model explains only 16% of variations in the dependent variable.

The next chapter contains the discussion of the results presented in this chapter. The first part makes use of the resulting correlations established in the first part of this chapter. The next part uses the regression results from the second part of this chapter. The discussion will be based on these findings and the theoretical and previous research sections in chapter two.

## **CHAPTER FIVE: DISCUSSION OF RESULTS**

### **5.0: Chapter Introduction**

The first part of this chapter will be discussion on the comparison between the various aspects of the schools. This discussion will be based on the results from chapter four. The next part of this chapter will focus mainly on the selected determinants of achievement from the correlation analysis done in the previous chapter for the entire sample. The last part will use the regression analysis to pinpoint existing relationships between the variables and achievement within the different schools.

### **5.1 Comparing the schools**

Mobility from one school to the other is a very common phenomenon in the English educational system in Cameroon. This movement is not the same for the three schools as was seen in chart 2 in the previous chapter. The public and private schools on the one hand has a high degree of mobility between each other and a limited mobility to the mission school. This is because both schools do not have live in possibilities and the fees are fairly moderate. On the other hand, the mission school has the least mobility of students to the other schools mainly because of the lower performance in the other schools and the desire to stay in a society perceived prestigious school. Also, the attendance of a mission school depicts a high status in the society so the parents insist on these schools to match their status within the society. Their next best choice is the private schools and the last is the public school.

The performance of students also varies within the various schools. The mission schools are the highest achievers in all nationwide examinations. These mission schools are characterized by close to a 100% pass rate in most public exams. The high pass rate is partly as a result of a highly selective process at the entry level and at the between class levels. Despite the high fees, only the high achievers from the primary schools are admitted into these schools. Within the years only students who have above a certain average pass grade are allowed to continue while others are kicked out or must repeat the class. In the final year of the secondary school, only students who pass a pre exam set in the school are allowed to represent the school in the public

exams. Those who do not make the pre exams will study in the school but will take the final exams in an examination center out of the school. The public school is the best in terms of absolute numbers but relatively less achievers than the mission school. The public schools have no selection process for entry as all those who make the final exam from the primary school can attend these schools. All students take the final exams within the school. The private school ranks the lowest in terms on performance. These schools cropped up within the last 20 years and have been increasingly gaining grounds in the society. They were regarded as the expensive option for students who were kicked out of the mission school for academic and disciplinary reasons and a last resort for students who are kicked out of the public school for disciplinary reasons. Increasingly, this perspective is changing as these schools are gaining grounds within the communities and also stocking up on various necessary school equipments and facilities. Presently parents and students are choosing these schools as first option and the performance will certainly improve in the near future.

The public school has the highest number of hours studied in a day than both the mission school and private school. They studied within hours set by the school, parents and some extra hours. The majority of students in this school studied within self set hours (extra hours). The mission school on the other hand did not study for as many absolute hours as did the public school. The majority of the students studied within the school compulsory hours followed by extra hours. Very few of the students studied within parent set hours as the period at home coincides with the various school holidays. The private school students studied the least number of hours as compared to the other schools. They had the least number of hours set by the school and the most set by their parents. Most students had personal hours set to study in this school. In all, the school sets least hours for the private school, the parents least for the mission school and the public school students set the least number of hours by themselves.

Attending extra classes is very common to the public and private schools with a few cases in the mission school. The private school students attended the most number of hours and displayed a dramatic increase in hours attended close to the exam period. The public school has a less significant increase in hours towards the exam period. The mission school as opposed to the other schools shows a reduction in hours on extra classes towards the exam periods. This is due to the fact that most extra classes

are organized out of regular school time and thus the mission school students can attend only during the holidays which are fewer close to the exam period. Also the fact that the mission school has a more organized teaching plan which ensures completion of the required syllabus well in time thus less need for extra classes than both the private and public schools.

Absence from regular classes was predominant in all three schools. The public school students were away for longer periods of time followed by the private school and lastly the mission school with the least number of days away. Transport was a predominant reason in the public and mission school but not an issue in the mission school. Illness and boredom are the main reasons for absences in the mission school while illness, lack of facilities and transport are the main reasons in the private and public schools with an addition of absentee teachers in the case of the public school.

There are very little discrepancies on the student's opinion concerning various school aspects. The main difference here is the private school students say they get much attention from their teachers while the mission and public school are undecided on the matter. All three schools record similar responses in all the other aspects.

The main goal of studying in all three schools is mainly long term with the highest percentage being from the private school. The mission school registers the highest number of students with a short term goal, while the private school has the least number of students with a short term goal.

As was the case with opinions, the schools show very minimal differences in student's attitudes. The private school has a good number of students who daydream in class several days a week as oppose to once a week for the mission and public schools. Also the private schools students do not do home and class assignments several times a week as opposed to the other schools that rarely do not do assignments. The mission school students rarely ask questions in class as opposed to the public and private schools who ask questions several times in a week.

The mission school has the highest percentage who owned the required text books. This is possible due to the fact that most mission schools pay for all the text books as part of the compulsory school fees. The public school has the least number of students who owned all the text books, most number of students with access to no text book and the most number of students with borrowed and owned books among those who did not have all the text books. A majority of the students in the private school did not



have access to all the text books but all the students had access to some of the textbooks.

The average number of close friends in all three cases ranges from 1 to 5 friends. The public school has the highest number of students with over 10 friends. The mission school has the highest number of students who had friends that passed their final exam while the private and mission school has the highest percentages of their students with friends that none of them passed their final exams. The public school has the highest number of students who drank alcohol followed by the mission and lastly the private school. The mission school ranks first among the few students who smoked followed by the public and lastly the private school.

The mission and public schools show a similar trend in the highest desired qualification with doctoral studies and masters their most desired levels. The private school shows a different picture with a majority having the Bachelor level as the most desired attainable level. This scenario maps unto the desired future occupation. The private school students mostly aim at being civil servants in the future. The public and mission schools both have the majority of students aiming to be professional in their chosen fields. The public school has the majority aiming to be senior officials and managers in the future followed by the mission and lastly the private school.

Father's educational level shows a similar pattern for the public and private schools. The majority in both cases have attended only the primary education with some fathers with no education at all in these schools. These schools have a corresponding low percentage of fathers with educational level in the graduate and post graduate levels. This situation is reversed in the mission school as over 75% of the fathers have attended at least the graduate level. The mission school has very few fathers at the lower end of the educational level with only 1 father with no education.

The public school has the highest number of students who got help with school work out of regular school time. They get help mostly from their siblings. The mission school students get help from their friends in the dormitories during school time and from their parents during the holidays. The private school has a good number of students who got help with their school work at home most of which was from their siblings as was in the case of the public school but also from their extended families. Most of the siblings and extended families who helped students in the public school and private school are high school students, while in the mission school, the help are

usually the smarter students in their class and at home their parents who have attended at least the graduate level.

As was in the case of father's educational level, the mission school students have fathers who are predominantly professionals in their fields, while the public and private school students have the majority of their fathers in the civil service. The private school also has students with fathers who are professional in their fields, while the public school students in addition to civil servants have fathers who are service workers and elementary workers. In all, considering the civil service as the midpoint in the occupational ladder, the mission school has fathers predominantly at the upper side of the ladder, while the public school has most of the fathers at the midpoint with the others at the lower side of the ladder and finally, the private school at the middle with a lean towards the upper side.

Mother's occupation paints a different picture as there are fewer professionals compared to the fathers. The mission school still has the best case scenario with many mothers in the civil service and most others are professionals. The private school has most of the mothers in the civil service and the others are predominantly lower i.e. service workers, traders and elementary workers. The public school has a completely different scenario with most of the mothers involve in elementary work and the others traders and service workers. The public school has the least number of mothers in the civil service. Parent's occupation has a positive correlation with student's future occupation which shows that most students follow in their parent's footsteps but often with a greater ambition. This is seen clearly in the case of the mission school where most of the fathers are professionals and over 80% of the students want to be professionals in the future. The case of the private and public schools show a positive shift in the student's future jobs from their parent's present occupation.

The ownership of resources in the home follows from the occupational status of the parents. The mission school with wealthier parents has students who own all or most of the selected resources in the survey. The private school is next up, while the public school with less wealthy parents has the least number of resources and in some cases none of the selected home resources. In line with the number of resources, the mission school students find their homes the most unsuitable for studies than the other two schools. In the other two schools, though they have some distractions from the resources they have, their main form of distraction is from having to do many house chores before they can have time to study and noise from their siblings and neighbors.

All three schools report the same disciplinary patterns at home with most of the students reporting high discipline levels at home.

The mission school parent's on one end have on average higher expectations from their children than the other two schools. At the other end, the mission school parents also have the highest number of parents who did not care about the grades their children had. The private school has the majority of parents in the high grades and average grades end with very few parents on the low expectation and only one parent did not care about their child's grade. The public school has the majority of parents expecting high grades from their children with a good number expecting average grades. The public school as the mission school also has a good number of parents who expect low grades and some who did not care at all. The mission school students rarely ever got punished for not doing well in school, while the public and private schools had some students who got punished for not doing well in school.

The private school had over 50% of the parents very involved in their children's studies and most others averagely involved. The mission school has the most parents averagely involved and the others very involved. The public school has the same scenario as the mission school but in addition a good number of parents who were not involved in their children's studies. In the same line the private school has the most number of parents who attend PTA meetings in their children's schools. The other schools have many parents who rarely attend PTA meetings.

In terms of satisfaction with allowance, the mission school students are most satisfied with their allowance. This follows from the fact that their parents are on average richer and also that they live within a confined area (school campus) and thus are limited to buy only what is available within the campus shop and at limited time periods. The private school is next on level of satisfaction, while the public school students are the most unsatisfied with their allowance.

In all three schools, students were sent away for non completion of compulsory fees. The public school students were sent away several times within the academic year than the other two schools. Also though on average in all three schools, the students were away for less than 5 days, the public school has the highest percentage away for over 5 days. There were a good number of students away for less than 10 days but more than 5 days in the both the public and private schools. In addition, the public school has 10 students who were away for over 10 days as oppose to 1 and 2 students in the mission and private schools respectively.

In terms of class size, the public school had the largest classes as they have very high capacities and limited or no restrictions to admittance. The private school has fairly large class sizes but not as large as for the public school. The rational for large class size here is purely for economic gains as more students translate into more money for the owners given the same resources. Thus these schools are characterized by a strain on the existing resources. The mission school has the smallest class sizes compared to the other schools. The limited space, restrictive entrance, high fees and quest to maintain high status quo all lead to relatively small class sizes in the mission school.

The evaluation of qualified teachers was purely from the student's perspective on how well the teachers teach their various subjects. The public school reports the highest number of unqualified teachers but at the same time the fewest number of subjects without teachers. This is because the teachers in these schools though highly trained are not committed to their jobs. They are unsatisfied with their incomes so most of them are involve in other side businesses. There are always teachers assigned by the educational ministry to all the schools for the various subjects thus the limited cases of subjects without teachers. The mission school students also reported many unqualified teachers but few cases of lack of teachers. This is probably due to the fact that the students expect too much from their teachers and are ready to put in less as compared to the other schools. The availability of teachers is backed by the desire to maintain the high achieving status quo. The private school has the least number of unqualified teachers but at the same time the highest number of subjects without teachers. This is because the teachers in these schools are usually graduates in the different subjects who are well educated in the various subjects. These teachers consider their jobs as transitional and if any other opportunity comes up, they usually drop the teaching job, thus many subjects without teachers.

The question of equipped lab shows that the mission school has the most well equipped lab compared to the other schools. The public school has some cases with well equipped lab and a good number with not well equipped lab. The situation in the public school is due to corruption as most of the schools have had considerable budget allocations for lab equipments. The private school has the majority of cases without a well equipped lab which is typical along with lack of other vital facilities.

The mission school has the highest number of students who reported having a library in their school followed by the mission school and lastly the private school. For the same reason as was for the labs case above, the public school have many

partially equipped libraries as opposed to well equipped libraries. The mission school also has more partially equipped than well equipped libraries. The private school interestingly has more well equipped libraries than partially equipped libraries implying that the few private schools that have libraries do a good job in equipping it.

The mission schools were the most with computer labs followed by the public and lastly the private schools. The mission school also had the highest percentage with access to the internet in the computer labs. The private school had the highest percentage of the students not allowed to use the internet while most of the public school students that were allowed to use the internet used it for studying. The private school students that had access to the internet used it mainly for chatting with friends.

Most of the public and mission schools had a health unit within the school campus, while less than half of the private schools do not have a health unit. Close to all of the public schools have a counseling service because it is allocated by the Ministry of Education. The mission schools have the least number of trained counselors compared to the other schools but all of these schools have a chaplain who is expected to address the student's problems especially religious and morality issues. The private schools had counseling services in most of the schools but they had the highest percentage of bad service as reported by the students.

The first choice of school had a similar pattern for all three schools with the students having as first choice the same school type as their present school, implying students from a public school will preferably maintain their school or move to another public school. There were still a good number of students who had as first choice another school type. The favorite school for this group was the mission school followed by the public school. The private school was the least desired as first choice of school.

## **5.2 Determinants of student achievement in entire sample**

This discussion draws from the correlation analysis carried out in the first part of chapter four of this study. This analysis gives the complete list of statistical significant relationships established in this study. The regression analysis confirmed some of the relationships so are thus embedded in this discussion.

Number of hours studied out of the regular school time is an essential learning occasion for the students. These study hours are used to enhance further understanding and deeper knowledge of what was taught during the regular class

time. This variable has a positive correlation with the achievement variable in the entire sample as well as in the three schools. This result is in line with the findings from the article by Schraw et al, where they identified learning orientations in students as an understanding enhancer as well as a tool for improving achievement. In this study, the number of hours studied was further subdivided into who set the hours for studies. The hours set by the school was found to be a positive influence on the student's achievement as well as the extra hours the students decided to add to their existing study time. The hours of study set by the parents was found to be negatively correlated to the performance of the students. At first glance this might seem to be controversial and a play down of the role of the parents, but context wise, this negative relationship is understandable. A regular school day is usually 7 hours, after which most schools have instituted a compulsory reading time within the school campus for the examination class students. The students typically go home late in the evening already exhausted. Implementing a further compulsory study time by the parents will be counterproductive as the students need to rest. Extra hours set by the students will be done in the most convenient and productive time as the students deems it necessary, thus a positive enhancer of achievement.

Attending extra classes is a phenomenon which is not very common in most other countries. This was found to be negatively correlated to achievement in all three schools. These classes are usually held out of regular class time and are most frequently in the weekends and are not necessarily in line with what was taught in the regular class time but just a part of the overall syllabus. Thus spending more hours in these classes will not improve on the student's performance.

The study goal variable was found to have a negative relationship with achievement. Thus in this case, moving from short term goals to long term goals reduces the student's performance. Short term goal of study in this case was passing the final exams with the best possible grade. This is achieved by assuming a mastery goal of the learning material. According to Ames and Archer (1988), students with this goal tend to use more strategies, prefer challenging task and consider success a result of their personal efforts. Their conclusion was that this orientation is very influential on the student's achievement as was the case in this study. Mastery goal was also found as a major characteristic of high achievers by Meece and Holt (1993).

Desired highest qualification was found to be positively related to performance in this study. Also desired future job which was negatively coded was found to have a

negative relationship with performance, thus a positive relationship. These two variables are considered as motivational proxies by Colin Rogers (1997), who identified them as future goal orientation. These motivational proxies according to him have a positive role to play in the students' performance which backs the findings from this study.

Student's attitude in class which involved the level of concentration in class as well as participation in terms of asking questions in class was found to be positively related to performance. The students who paid more attention in class and daydream about other things less performed better than those who were always absent minded in class. Also, those who regularly asked questions in class did better than those who did not participate actively in class. Benbow et al (2007) identified these aspects as problems with large class size but this study did not find any correlation between these aspects and class size. These attitudes were found in all school despite the differential class sizes between the schools especially the mission and public school.

Access to the required text books is a very serious issue in Africa. This variable was found to be positively correlated to achievement. This finding is in line with Plonski's findings in Tanzania where donated English text books from the United States improved on student's performance in English language scores. The mission school students had the highest access to all or most of the required text books and are thus the highest achievers within the sample. The lack of text books is due to the parents not being able to afford these books and also the poorly equipped libraries in the schools. In this situation of limited access to text books, the students are sole depended on the teachers thus any negative changes on the part of the teachers will lead to adverse effects on student's performance as is the case in the private schools.

Peer pressure was measured in terms of number of close friends the students had and if these close friends were successful in their final exams. The variable number of friends was negatively correlated with achievement, implying that increasing the number of close friends will impact negatively on the student's performance. The other aspect of peer pressure measured by the performance of the friends showed a positive but no significant relationship to the achievement variable. These results can be accounted for by the difficulty involved in identifying and separating other aspects of the friends influence like home and school effects (Hanushek et al (2003)).

The mission school students who got help with their school work during school time got help from their class mates. According to Henderson et al (1978), a low

performing student placed in a class with a high mean IO will respond positively with an increase in performance as is the case in the mission schools.

Father's educational level was positively correlated to the student's achievement. Parent's level of education according to Stevenson & Baker reflects on the parent's attitude towards the child's schooling, drop outs, home work habits etc which all affects the child's performance. Also parents with high educational background are a role model as well supportive towards their children attaining high educational levels.

Parent's occupation was found to have a positive influence on the student's performance. The role of the parent's socio economic status is very vital in this study as it determines firstly which school the student will attend and also the resources like text books that the student will have access to. This effect of family background is very minimal in most developed countries where the accessibility of schools and student resources are taken care of by the state. Thus the socio economic status of the parents was found irrelevant to achievement in many studies (Ludger, 2004), while it is found positive in this study.

Home possessions were found to be positively related to achievement. These resources are a form of relaxation as well as educative to the students especially TV and computers. Despite the fact that these resources sometimes acts as a distraction to the students, the educative aspect over shadows the distraction effects leading a positive effect on these resources.

Parent's expectations have a positive relationship with achievement in this study as was the case in the study by Parsons et al (1982). Parent's expectations in this case builds on the students self expectation as well as act as a motivation to the students to work harder to perform better. According to Sehee & Hsiu –Zu parents aspirations for their children directly influences the child's aspirations and locus of control, thus parents who aspire and expect much from their children translates into better performance on the part of the students.

Parent's involvement in the student's studies was found to have no systematic influence on the student's performance in this study. The role of the parents was divided by Ho Sui-Chu and Douglas (1996) into on campus involvement and home involvement. On campus involvement included activities like attending PTA meetings and volunteering in school projects. In this setting, attending PTA meetings was the most common on campus form of involvement common among parents. This was included in the study as a separate variable from parent's involvement. This variable



was found to have a positive relationship with achievement. Thus the insignificance of the parent's involvement variable was due to the inclusion of home involvement. This finding is in line with Sui-Chu and Douglas's findings which concluded that on campus involvement is positively more influential than off campus involvement on the student's performance. Also this finding is in line with Houtenville and Smiths crowding out effect of school resources where parent's involvements tends to reduce and become insignificant where the school's resources and involvement increases. This is especially noticeable in the Cameroon system where the school institutes extra study hours for the students, mechanism to improve on completion of in class and home assignments, increase discipline, counseling services etc. These changes tend to reduce the significance of parents involvement as most of these responsibilities were originally taken care of by the parents.

Sending students away from school because they have not completed the compulsory fees is common mostly in less developed countries where education is achieved at a cost to the individuals. In most economic advanced countries, education is free thus no instance of being send away from school for lack of fees. The number of days away due to lack of fees is negatively correlated with achievement implying the more the number of days away from school, the lower the student's performance. This is very obvious as time spend away from school means missing out on lectures and in an environment where the students lack the basic text books, the implications are further enhanced.

As already mentioned above, the role of the teacher in this setting is very instrumental in the student's performance. Their effectiveness determines the overall school performance. The variable number of subjects without teachers or good teachers has a negative relationship with achievement. Increasing the number of subjects without teachers reduces the student's performance as well as the overall school performance. This is in line with sanders and Rivers findings in Tennessee. They concluded that increasing teacher's effectiveness benefits firstly the under achievers in the class and subsequently the entire class performance.

The number of times a student visits the library in a month has a positive relationship with the student's performance. The more the student uses the library the higher the student's performance. This is the same relationship that was concluded by Lonsdale Michele (2003) in Australia. Despite the fact that the libraries are mostly

averagely equipped, most students use the library as a quiet area to study when they have free time in their school schedule.

The variable class size was found to be insignificant in the entire sample as well as in all the three schools to achievement. This variable was found to have a negative relationship with achievement in the French section of Cameroon by Michaelowa (2001). The results in this study are in line with Hoxby's (2000) findings of no significant relationship even with a 10% reduction in class size in 649 schools in the US. The situation of very large class sizes is common at all levels within this system of education and as such its role and significance has been reduced as it is considered normal.

School resources in terms of facilities like laboratories, well equipped libraries, computer labs with internet available for use by the students, health unit etc do not have any significant impact on student's achievement. This relationship has always been an ambiguous one with researchers on both sides of the coin, while others persist on a positive influential relationship; others find no link at all. This study sided with those on the "no link" side of the coin. This results can be attributed to the fact that very few or no school can boast of having all the resources and equipped to standard. In such a situation, the role of these resources is reduced and other aspects like the role of the teachers, student's inputs become more influential in the student's performance. Despite the fact that most schools have a computer lab, there is no relationship between this variable and the achievement variable. The availability of computers as was concluded by Wenglinsky (1998) is not a first order condition for improving achievement but the how and what it is used for that determines its role on achievement. In some schools, the use of the computer is being incorporated into the pedagogy and teaching process which according to Schacter & Fagnano (1999) is the best method of ensuring achievement results from the institution of computers in schools.

Over 50% of the students were not allowed to use the internet in all three schools though it was available.

### **5.3 Determinants of student achievement in the public school**

This section and the next two sections below will use the regression analysis to pinpoint the variables that are influential in the public school as oppose to the other schools.

The number of hours studied has a positive causal effect with achievement within the public school. Students who study more out of the regular class time perform better in the final exams than those who study less hours. Just as was the case in the entire sample above, the breakdown of hours set by the school is positively related to achievement while the hours set by the parents is negatively related to achievement. Given that most of these students do not own the required text books, the hours they put in to study the available school material is very essential to their success. These students also face a lot of distractions at home in the form of noise from their siblings and neighbors, many household chores to complete and the home resources where present, thus they are better off studying in school allocated time than parents allocated time at home.

The highest desired qualification is found influential for the public school student's performance. Those who are motivated by the desire to attain high levels of education perform better than those with lower desired qualifications. The dream job was not found significant as a motivational factor for the public school students. This is probably because the society is a very corrupt one and most major professions are achieved backed by high economic status and connections. Given that the parents of the public school students are the least economic endowed and thus have very few connections with possible employing offices, their chances of getting their desired jobs are not very certain. In this light, their desired qualification is a stronger motivational factor as they have control over it rather than their dream job.

Asking questions in class is positively related to their performance in the final exams. The public schools are characterized by very large class sizes compared to the other schools. Participating in class in the form of asking questions makes a difference as it ensures clearer understanding for the student. It also creates some sort of student teacher relationship in a situation where there is very little relationship statistically.

The use of the library is found significantly important in the performance of the public school students. Though the libraries are not well equipped, the students use the building as a quiet reading area. When they have free periods between classes and when the teachers do not show up for regular classes, the students use the time as extra study hours and this is done in the library which will be quieter than the class

rooms. Thus students who pay more visits to the library perform better than their counterparts who do not use the library often. Also there are some text books and other useful materials in the libraries which are relevant to the different syllabus. Students who visit the library make use of these books and other materials to compensate for their lack of ownership.

From the above discussion, it is clear that the student specific effects are most influential in the performance of public school students followed by the school resource (library). There is no home influence from the regression analysis. The parents in this school has the least levels of education as well as are more involved in less professional jobs than the parents in the other two schools. This result is opposite from the findings in Malawi and Thailand by Lockheed et al where they found family effects to be instrumental in achievement. Their argument was based on a situation where various educational programs were instituted to enhance achievement and the family background was essential not just to achievement but also to the acceptance and better functioning of the programs. Without these programs, the role of the home background will be reduced as is the case in this study.

#### **5.4 Determinants of student achievement in the mission school**

The results from the regression analysis show that the parents setting reading time for the students at home is negatively related to their performance. All or close to the entire mission schools are boarding schools. The students come back home only for the short holidays between school terms to relax. During these times, they make use of their many possessions at home and spend time socializing with their friend. Parents setting compulsory reading times during these short school breaks are usually opposed by their children. If the children do not socialize and relax when they have these breaks, they will most certainly be distracted when they go back to school to continue their studies. This distraction is usually counterproductive to the student's academic performance.

The student's motivation in terms of dream job and desired qualification are influential in the performance of the mission school students. Unlike the public school students, the mission school students come from very high economic background and are certain of achieving their dream jobs with their backing educational qualifications. Students who aim at highly professional jobs and backing high qualifications perform better than students with lower ambitions.

The possessions in the homes are positively related to the student's performance. These possessions are the main pre occupations of the students when they have school breaks. These assets help the students relax as well as are educative as a source of information to the students. They watch educative programs which give them a broader inside into some of the subjects they learn at school.

Asking questions in class was found significant in the student's performance in the mission school as was the case in the public school. Thus students who participate more in class are better placed to understand more and subsequently perform better in their exams.

All three groups of factors were found to be influential in the performance of the mission school students, though in varying proportions. The student specific factors are most influential with lesser influence from the home and school effects with one significant variable each.

### **5.5 Determinants of student achievement in the private school**

The private school gives the most ambiguous results compared to the other two schools. The students are motivated by their dream jobs and not their desired qualifications as was in the other two schools. Those who desired highly skilled and professional jobs performed better than those who were aiming for less skilled jobs. These schools have a good number of students who are from high economic status families but where not academically strong to get into or to maintain their positions in the mission school. Also they have a good number of kicked out students from the public school for disciplinary reasons. With this combination, the prospects for attaining high qualifications are usually slimmer but most hope to get good jobs in the future.

The home resources are beneficial to the student's performance in the private school. This is mainly used as an informal and easier way of studying some aspects of the course syllabus especially through documentaries.

The ambiguity of the results can be explained by the student selection or lack of defined selection criteria for admittance into the school. This produces a sample with attributes on both sides of the coin making it difficult to establish systematic relationships between the various variables.

## **CHAPTER SIX: CONCLUSSIONS AND RECOMMENDATIONS**

### **6.0: Chapter Introduction**

The first part of this chapter will give valid conclusions from the discussions in the previous chapter. The next part will be on recommendations to parents and the school which can go a long way to improve on students achievements based on the conclusions. The last part will give the shortfalls of these study and recommendations for further research.

### **6.1: Conclusions**

This study was carried out in the English system of education in Cameroon and had three main schools from the public, mission and private sectors as the selected sample. This study aimed at comparing the three different schools as well as to identify the determinants of achievement in the entire sample as well as for the various schools.

From the results, the mission school is the highest performing school followed by the public school and lastly the private school. The public school students put in the most extra hours in studying out of regular class time than the mission with the private school students putting in the least number of hours. The public and private school students attended many hours of extra classes than the mission school students. There were many absences from all three schools for less than five days in an academic year with the exception of the public school that had many absences over 10 days within a school year. Illness was the main reason of absence though lack of transport was a common reason in the public and private school. The mission school students had the most number of students who had a short term goal as their main goal of studying as opposed to the public and private schools who had predominantly a long term goal. In terms of student attitudes in school, there was a similar trend in all three schools. The mission school students owned or had access to most of the required text books, while the public school had many students with access to no text books as well as very few who owned the text books. The private school was divided with some students with all the text books and also a good number with no or few of the text books. Most students in the public and mission schools desired to attain a PhD level and higher while most students in the private school desired to attain a Bachelor level and some the Masters level. The desired future occupation shows that the

mission school students aspire to be professionals while the public school students aspire to be professionals with some as civil servants also. The private school has the majority with their goal set as civil servants with some as professionals as well as service workers.

Comparing their home background, the public school had most fathers who attended only the primary school level with a good number with no education. The mission school had parents who had attended at least a postgraduate education, while the private school had many parents with only primary level as well as many with graduate level education. This map unto the parent's occupation with the public school parents mostly civil servants and the majority in service, trade and elementary jobs. The mission school parents are mostly professionals, while the private school has many civil servants, some professionals and a good number in the lower end jobs. The mission school students owned the highest number of possessions at home followed by the private school and lastly the public school. The private school had most of their parents who expected high or average grades from the students while the mission and public schools had some parents who did not care and some who expected low grades in the public school. In terms of involvement, the private school has the most involved parents while the mission and public school had averagely involved parents. The mission school students were most satisfied with their allowance followed by the private school and lastly the public school. In all three schools, students were away from classes because they had not completed the compulsory fees. The public school had the highest number of times in a year when the students were send away and the highest numbers of days the students were away.

The public school had the highest class sizes followed by the private school and lastly the mission school. The private school had the highest number of subjects without qualified teachers. The mission school had the most equipped lab and library followed by the public school and lastly the private school. The public school had the most access to the internet and it was used purposely for studying. Most mission and public schools had a health unit on campus, while less than half of the private schools had a health unit. The private and public school had a counselor in over 90% of the schools while the mission school had the least number with counselors. The first choice of school for most students was their previous school, but those who changed schools had the mission school as the best choice followed by the public school and lastly the private school.

The determinants of achievement in the entire sample were from the individual correlation analysis and from the regression model. Increasing the number of hours studied out of regular class time was found to be influential in the final performance especially hours set by the school. More hours set by the parents was not found to be useful in the student's performance. Attending many hours of extra classes was not found to be helpful in the student's performance. Students with a short term goal performed better than students with a long term goal. Students who concentrated and participated more in class performed better than their counterparts. Those who had access to more textbooks were among the high achievers than those who had few or no access to text books. The higher the number of friends the less their performance as well as the higher the number of times the students consumed alcohol, the less their performance. Motivation in the form of high desired qualifications and high skilled future jobs was positively related to performance. There was a positive relationship between parent's education and occupation with the student's achievement. The greater the parent's expectations and involvement in the student's studies, the higher the student's performance. The longer the student is away because of non completion of fees, the less the student's performance. Increasing the number of times the student visits the library is positively influential in the student's achievement level.

The student characteristics are the most influential factors in their achievement in the public school and the mission school. The home background was not found essential in the public school, but relevant in the mission school. School resources were found important in both the mission and public school. The private school had an ambiguous result which was explained by the selection process into the school. The school has a combination of the major characteristics from both schools resulting in very few established systematic relationships. Only student's motivation and home resources was found important in their performance.

## **6.2: Recommendations for performance**

From the results, parents should limit the number of hours they set for their children to study at home as it is less productive. In this same light, the schools should take over the task of setting extra reading hours in cases where this has not been done. Parents should be involved in campus activities at their children's schools like PTA



meetings and other projects as it is more beneficial than at home involvement in their studies.

Students should spend less time in attending extra classes but should rather concentrate more on their regular classes.

Students should be encouraged to spend more time in the libraries and to participate in class more often especially in large classes.

Studying with the internet should be instituted and encouraged in the schools as it will boost performance.

The schools should endeavor to stock up the libraries with the required text books to increase access for those who cannot afford the books.

Students should be allowed to relax especially during the holidays and they should be encouraged to watch educative programs on TV.

### **6.3: Recommendations for further research**

This study was based on the point of view of the students which does not exhaust the whole picture of student's performance. A similar study which takes into account home background from the parents' perspective and school resources from the perspective of the teachers and administration will certainly throw a new light to the study.

This study was based within an urban area with characteristics that are common to other urban areas. Doing a similar study in a rural area within the same country will be interesting, not just for the results but also to compare the findings with those from this study.

This study concluded that the home background has the least role to play in the student's achievement compared to the other factors. A study which emphasizes only on the role of the home background will be interesting as it will investigate the deeper or lack of relationships between the home factors and student's performance.

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## APPENDIX: QUESTIONNAIRE

### Questionnaire

**Topic:** What determines student achievement? A comparison of the case of a public, private and mission school in Cameroon.

**Introduction:** Hi, my name is Rose. As part of my Master's thesis in Comparative and International Education, I am conducting a survey on the determinants of student achievement. The questions will mainly ask you about the last academic year (form five). This will cover three main areas; student's personal characteristics, home characteristics and school characteristics. I will be most grateful if you will fill out this questionnaire. Your anonymity will be respected thus you are not expected to write your name but however, I will need some background information about you. Thanks.

### Part one: Background information

- Questionnaire number .....
- 1.1 Name of present school .....
- 1.2 Gender of respondent (please tick)
- Male                      female
- 1.3 Age of respondent.....
- 1.4 What is your specialty
- Arts              Science      commercial
- 1.5 Which tribe are you from.....
- 1.6 Where is your home located now.....
- 1.7 Marital status of respondent (please tick one)
- Single.....
- Married.....
- Cohabiting.....
- Divorce .....
- Widow.....

### Part two: Student specific characteristics

- 2.1 Which school did you attend last year (form five).....
- 2.2 How many subjects did you pass in the last O level exams.....
- 2.3 Please list all the subjects taken (passed and failed) and the corresponding grades in the last O level
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 2.4 Approximately how many hours did you study a day.....

- 2.5 Were the hours studied compulsory reading hours set by the school  
 Yes No
- 2.6 If yes, approximately how many hours a day.....
- 2.7 Were the hours studied compulsory reading hours set by your parents?  
 Yes No
- 2.8 If yes, approximately how many hours a day.....
- 2.9 Did you study some extra hours in addition to the compulsory hours?  
 Yes No
- 2.10 If yes, approximately how many extra hours did you put in to study a day?
- 2.11 Did you attend extra classes?  
 Yes No
- If 2.12 is Yes, then answer 2.13 and 2.14 if not go to 2.15
- 2.13 Approximately how many hours of extra classes did you attend a week during the following periods.  
 September – March ..... April – May.....
- 2.14 How much did the extra classes cost per hour  
 September – March..... April – May.....
- 2.15 Were you ever absent from school?  
 Yes No
- 2.16 If yes, approximately how many times in the academic year  
 1- 5 times  
 6 – 10 times  
 10 and above
- 2.17 What was the main reason for your absences? Please tick  
 -Illness  
 -Family problems  
 -Lack of means of transport to school  
 -No reason  
 - Others (specify)
- 2.18 The following phrases aim to explain school life and expectations: please give a number from 1 to 5 corresponding to what you opinion concerning the phrase.  
**1=Totally agree, 2= Agree 3= Maybe, 4= Disagree and 5= Totally disagree**  
 - School is boring.....  
 -It is very important to have good grades.....  
 -There is much theory than practice in school.....  
 -I get very little attention from my teachers.....  
 -My teachers are very good in what they teach.....  
 -I learn more on my own than in class.....  
 -I learn a lot from my friends.....  
 -school is important irrespective of my future career.....  
 -I will not get a job if I don't go to school.....
- 2.19 What is your main goal when you study? Please tick **one**  
 To get an A grade  
 To get at least a pass grade  
 To get to a high educational level in the future  
 To get a good job in the future
- 2.20 Please give a number answering the questions below using:  
**1= Every day, 2= Sometimes in a week, 3= Ones a week, 4= Rarely and 5 = Never**

- Do you day dream about other things during school hours?.....
- Do you get acknowledgement from the teacher for good performance?.....
- Do you sleep in class?.....
- Do not do home and class assignments?.....
- Do you ask questions in class?.....
- Do you voluntarily answer questions in Class?.....
- Do you get headache after school? .....
- Do you learn something important in school?.....
- Do you get punished for bad behavior in school?.....

2.21 Did you have access to **all** the required textbooks

Yes

No

2.22 If No, which ones did you have access to (please list the subject and tick if personal copy or borrowed book)

Subject

Own

borrowed

1

2

3

4

5

6

7

8

2.23 How many close friends did you have.....

2.24 Did they all pass their final examination? Please tick

All

some

none

2.25 Did you drink alcohol?

Yes

No

2.26 If yes, approximately how many times a month .....

2.27 Did you drink with your close friends?

Yes

NO

some of them

2.28 Did you smoke cigarettes?

Yes

No

2.29 If yes, approximately how many sticks a day.....

2.30 Did you smoke with your close friends?

Yes

No

some

2.31 What is the highest degree you will like to attain? Please tick **one**

A level

First degree

Masters degree

PhD and higher

2.31 What is your dream job?.....

### Part three: Home background

3.1 Who did you live with (During the holidays for boarders)? Tick one

Father, mother, siblings

Parents, siblings and extended family

- Spouse and children
- 3.2 What is the highest class your father attended?.....
- 3.3 What is the highest class your mother attended?.....
- 3.4 Did you get help with your school work when you were at home
- Yes No
- 3.5 If yes, who helped you (relationship to you).....
- 3.6 What is the person's highest qualification?.....
- 3.7 Does your father work?
- Yes No
- 3.8 If yes, what is his occupation?.....
- 3.9 Does your mother work?
- Yes No
- 3.10 If yes, what is her occupation?.....
- 3.11 Does your spouse work?
- Yes No
- 3.12 If yes, what is her/ his occupation?.....
- 3.13 What resources do you have at home? Please tick
- TV -VCD/DVD
- Cable TV -Internet
- Computer -Video games
- None of the above
- 3.14 What were your parents expectations concerning your educational grades? Please tick
- High grades average grades Low grades Did not care
- Father
- Mother
- 3.15 Did you get punished for not doing well in school?
- Yes No
- 3.16 How involved were your parents in your studies and school live? Please tick
- Very involved Averagely involved Not involved
- Father
- Mother
- 3.17 Did your parents attend PTA meetings in your school?
- All Some None
- 3.18 Are you able to study comfortably at home?
- Yes No
- 3.19 If no, please briefly explain.....
- .....
- .....
- .....
- 3.20 How will you rate the **level of control** by your parents over your activities at home?
- Very high High Average Low Very low
- 3.21 How satisfied are you with the allowance you get from your family?



Very satisfied      Satisfied      Ok      Dissatisfied      Very dissatisfied

3.22 Have you ever been send away from school for school fees or other compulsory fee

Yes      No  
3.23 If yes, approximately how many times in the school year?.....

3.24 On average how long were you away?.....

#### **Part four: School Resources**

4.1 How many students were in your class?.....

4.2 Did you have qualified teachers for all the subjects you took?

Yes      No

4.3 If no, please list the subjects in which you did not have a qualified teacher?

4.4 Did any of the subjects you took required lab work

Yes      No

4.5 If yes, did you have access to an equipped lab?

Yes      No      partially equipped

4.6 Did your school have a library?

Yes      No

4.7 If yes, how equipped was the library?

Well equipped      Averagely equipped      Badly equipped

4.8 How often did you use the library in a month?.....

4.9 Did your school have a computer lab?

Yes      No

4.10 How often did you use the computer lab in a month?.....

4.11 Did the lab have internet connection?

Yes      No

4.12 If yes, what did you use the internet for?

-Study      -Others (specify)

-E-mailing friends

-Chatting

4.13 Approximately how many hours did you spend in a week on the internet?

.....

4.14 Does your school have a health unit?

Yes      No

4.15 Does your school have a school counselor?

Yes      No

4.16 if yes, How are the services

Good      ok      bad

4.17 Are you a member of any club at school?

Yes      No

4.18 If yes, which club (name of club)?.....

#### **Part five: Choice of school**

5.1 Which school was your first choice of school for high school and why?.....

.....

.....

.....  
.....  
.....  
.....

5.2 Did you get into this school?

Yes No

5.3 If no, why did you not get into the school?

5.4 Why did you chose your current school?.....

.....  
.....  
.....  
.....

5.5 What word comes to your mind when you think of the three different forms of schools?

Public school is .....

Mission School is .....

Private school is .....

Thank you for your corporation. All information given here will be treated as confidential and used only for the writing up of a master's thesis. Good luck with the rest of your studies